# Canadian Journal of Psychology

THE JOURNAL OF THE CANADIAN PSYCHOLOGICAL ASSOCIATION

# Volume 3, 1949

EDITOR: JOHN A. LONG
ASSISTANT EDITOR: KATHLEEN M. HOBDAY

CONSULTING EDITORS:

E. S. W. BELYEA, J. TUCKMAN, R. VINETTE, W. G. SCOTT, W. H. D. VERNON

PUBLISHED QUARTERLY
by the
UNIVERSITY OF TORONTO PRESS

BF . CZZ V. 3-4

SW

# TABLE OF CONTENTS

VOLUME 3, 1949

# No. 1, MARCH

General Semantics in Psychological Practice: J. S. A. Bois	1
The Role of the Clinical Psychologist in Canada: MARY D. SALTER	6
Predicting the Behaviour of Individuals: DONALD SNYGG	
Personality Tests and Teaching Ability: F. T. Tyler	30
Ethics as Philosophy Rather than Psychology: Anthony M. MARDIROS	38
Canadian Theses in Psychology, 1948	44
News and Notes	
The Psychological Association of the Province of Quebec: List of Members	50
No. 2, June	
Personal Constancy and the Broblem of Matination, Bangur B. M. of ver	per pre
Perceptual Constancy and the Problem of Motivation: ROBERT B. MACLEOD Guidance and Some Recent Developments in Psychological Theory: NICHOLAS	57
Hobbs	67
The Frame of Reference Concept: B. R. PHILIP	73
Three Theories of the Psychology of Meaning: H. W. WRIGHT	80
A Preliminary Study of Adjustment to Life in the North: Douglas E. SMITH	89
Book Reviews	98
Proceedings of the Annual Meeting of the Ontario Psychological Association	102
No. 3, September	
A Progress Report on Industrial Psychology: J. S. A. Bois	105
Changing Teachers' Attitudes: Joseph E. Morsh and E. Mavis Plenderleith	117
The Problem of Learning: JOHN K. McCreary	130
The Amprior Experiment. A Study of World War II Pilot Selection Procedures in the RCAF and RAF: EDRO I. SIGNORI	136
Book Review	151
Proceedings of the Eighth Annual Meeting of the Canadian Psychological Association	153
Constitution of the Canadian Psychological Association	162
Council and Committees	166
Membership List	168
Regional Distribution of Members	191

# No. 4, DECEMBER

New Psychologies of Yesterday and Today: ROBERT B. MACLEOD
The Social, as Distinguished from the Behavioural Field: H. W. WRIGHT
Meaning, Motives, and Social Organization: J. D. KETCHUM
L'Usage du test Rorschach dans l'étude anthropologique d'une société pay- sanne: Claire Mathieu-Fortin
National Research Council Grants-in-Aid and Scholarships in Psychology: O. E. Ault
Canadian Psychological Association, 1950 Annual Meeting
The Net of Reciprocal Influence. A Problem in Treating Sociometric Data:  JOHN R. SEELEY
Book Reviews
Proceedings of the Annual Meeting of the Psychological Association of the
Province of Ouebec





Vol. 3, No. 1

March, 1949

# Canadian Journal of Psychology

THE JOURNAL OF THE CANADIAN PSYCHOLOGICAL ASSOCIATION

Editor: John A. Long Assistant Editor: Kathleen M. Hobday

CONSULTING EDITORS:

E. S. W. Belyea (British Columbia); J. Tuckman, R. Vinette (Quebec); W. G. Scott (Ontario); W. H. D. Vernon (Maritimes); D. C. Williams (Prairie Provinces)

#### CONTENTS

General Semantics in Psychological Practice: J. S. A. Bois	]
The Role of the Clinical Psychologist in Canada: Mary D. Salter	6
Predicting the Behaviour of Individuals: Donald Snygg	19
Personality Tests and Teaching Ability: F. T. Tyler	30
Ethics as Philosophy Rather than Psychology: Anthony M. Mardiros	38
Canadian Theses in Psychology, 1948	44
News and Notes	47
The Psychological Association of the Province of Quebec: List of Members	50

# PUBLISHED QUARTERLY

MARCH - JUNE - SEPTEMBER - DECEMBER

157

THE UNIVERSITY OF TORONTO PRESS

# Canadian Psychological Association

#### COUNCIL

Honorary President, R. B. LIDDY, London

EXECUTIVE: President, J. S. A. Bois, Montreal; Past President, S. N. F. CHANT, Vancouver; President Elect, C. R. Myers, Toronto; Secretary-Treasurer, G. H. Turner, London.

DIRECTORS: J. D. KETCHUM, Toronto; E. C. Webster, Montreal; D. E. SMITH, Edmonton; Mary L. Northway, Toronto; N. W. Morton, Ottawa; W. E. Blatz, Toronto.

EX OFFICIO MEMBERS OF COUNCIL: R. B. MALMO, President, P.A.P.Q.; W. G. BLACK, President, B.C.P.A.; N. W. MORTON, President, O.P.A.

#### COMMITTEES

MEMBERSHIP COMMITTEE: Chairman, D. C. WILLIAMS, Winnipeg; W. H. D. VERNON, Wolfville; LOUISE M. THOMPSON, Fredericton; D. J. WILSON, Montreal; C. BILODEAU, Quebec; R. H. SHEVENELL, Ottawa; B. R. PHILIP, Kingston; MARY D. SALTER, TOTONTO; MARY J. WRIGHT, LONDON; T. W. COOK, Saskatoon; D. E. SMITH, Edmonton; E. S. W. BELYEA, Vancouver.

RESEARCH PLANNING COMMITTEE: Eastern Section: Chairman, E. A. Bott, Toronto; Treasurer, D. O. Hebb, Montreal; Secretary, K. S. Bernhardt, Toronto; J. D. Ketchum, Toronto; R. B. Liddy, London; W. Line, Toronto; N. Mailloux, Montreal; N. W. Morton, Ottawa; C. R. Myers, Toronto. Western Section: Chairman, S. N. F. Chant, Vancouver; Secretary, J. E. Morsh, Vancouver; D. E. Smith, Edmonton; T. W. Cook, Saskatoon; D. C. Williams, Winnipeg.

COMMITTEE ON THE TEACHING OF PSYCHOLOGY: Chairman, R. H. Shevenell, Ottawa; J. E. Morsh, Vancouver; D. C. Williams, Winnipeg; Mary J. Wricht, London; Mary D. Salter, Toronto; B. R. Philip, Kingston; L. T. Dayhaw, Ottawa; B. Laurier, Montreal; G. A. Ferguson, Montreal; Louise M. Thompson, Fredericton.

COMMITTEE ON PUBLICATIONS: Chairman, K. S. Bernhardt, Toronto; Secretary, Kathleen M. Hobday, Toronto; C. R. Myers, Toronto; W. R. Wees, Toronto.

COMMITTEE ON THE COUNSELLING OF UNIVERSITY STUDENTS: Chairman, W. H. D. Vernon, Wolfville; J. M. Chagnon, Ottawa; Mary D. Salter, Toronto; D. C. Williams, Winnipeg; E. S. W. Belyea, Vancouver.

C.P.A. REPRESENTATIVE ON THE CANADIAN SOCIAL SCIENCE RESEARCH COUNCIL: R. B. Liddy, London.

## 1949 ANNUAL MEETING Montreal, May 26th, 27th, 28th

Correspondence regarding subscriptions should be sent to the Canadian Psychological Association, 100 St. George St., Toronto 5, Canada.

Manuscripts or correspondence on editorial matters or advertising should be sent to the Editor, John A. Long, Ontario College of Education, 371 Bloor St. West, Toronto, Canada.

AUTHORIZED AS SECOND-CLASS MAIL, POST OFFICE DEPARTMENT, OTTAWA.





# Canadian Journal of Psychology

### GENERAL SEMANTICS IN PSYCHOLOGICAL PRACTICE<sup>1</sup>

J. S. A. BOIS Montreal

The techniques of General Semantics are simple and easily understood. In fact, they contain nothing radically new to anyone who is familiar with the scientific method. I knew a bright university student who learned them very quickly and could talk glibly about them. But they did not help him readjust himself until he consented to go through a quasi-physical drill and training period, as does an individual who wants to learn to typewrite or to drive an automobile.

The main assumptions of General Semantics are as follows:

- (a) The structure of the world is such that it is made up of processes.
- (b) There is no such thing as an object in absolute isolation.
- (c) Words are not the things they speak about.
- (d) Every assertion of identity is false.
- (e) No discourse can define all of its terms.

Its major theses are that:

- (a) We can transform and reconstruct our familiar inherited languages so that the structure of our daily speech will approximate that of mathematics and be free from the manifold vicious elements of primitive mythologies and primitive metaphysics now ingrained in the intimate structure of even the most refined vernaculars.
- (b) This transformation is achieved by educating children and reeducating adults in the consciousness that, by neurological necessity, they continually abstract, that their abstractions belong to different orders or levels, and that, in the interests of personal adjustment, it is both possible and necessary habitually to avoid identifying or confusing the things of one level with those of another.

Its principal techniques are the:

(a) Index, to indicate individuality and differences in similarities, as Smith,

Smith, Smith, ...... Smith, for "man."

(b) Chain-indexes, to indicate the multiplicity of space-time factors or elements that identify a particular individual in a particular situation. For instance-Smith, Eng., Sales Mgr., etc. Chain-indexes also convey the mechanisms of chain reactions, which operate generally in the world, life included.

<sup>&</sup>lt;sup>1</sup>Paper read at the Annual Meeting of the Canadian Psychological Association, Winnipeg, May 27, 1948.

(c) Date-indexes, to stress the differences due to time in a world of processes. For instance Smith  $_{1945}$  is different from Smith  $_{1948}$ .

(d) Etc., to remind us permanently that our statements are unavoidably inadequate to the situation they attempt to cover.

(e) Quotes, or quotation marks, to forewarn us that abstract terms are not to be trusted, and that speculations based on them are misleading.

(f) Hyphens, to remind us of the complex inter-relatedness in this world, which the science of today conceives as four-dimensional. For instance: space-time continuum, psycho-somatic medicine, thinking-feeling activities, management-labour problems, etc.

Korzybski (3) claims that the semantic education of children is easy, and that of adults is difficult. I have had very little experience with children. Of the adults I have had to deal with, the "word-addicts" are the least promising subjects.

Here are a few illustrative examples; ranging from cases where a complete re-education was attempted, to casual consultations where one particular device did the trick. I must mention at the outset that, in all serious cases, I make it a practice to train the subject from the very beginning in general and differential relaxation, according to Jacobson's technique.

#### Case 1.

E. B., male, single, twenty-seven years of age (1947). Brought up alone by possessive and domineering grandmother who died in 1945. Health satisfactory. General ability in top 10 per cent of general population. Occupation: secretary-stenographer. Saw a psychiatrist in 1940, because he "could not feel any sexual attraction to girls." Had to find a solution in "extensive if not wise reading in religion, sex and psychology, and metaphysics, taught Sunday School to attempt sublimation." Received sex instruction, which he "believed and accepted intellectually" but was unable to apply. Was told that he was brought up an idealist, had tried to be better than others and should stop trying to be so. In 1945, after grandmother's death, had an interview with another psychiatrist who "didn't believe he was mentally ill" and offered advice which subject found inadequate. Went to a quack psychologist who gave him some release by means of suggestion on phonograph records. In November, 1947, went to another psychiatrist "of unquestioned merit." "But one sitting was inadequate and I felt he was either not interested or that I wasn't really ill. Or perhaps ethics forbade him asking me to come back again." States that in his travels he can always make two or three good friends, but "they are usually neurotics or other people who have messed up their lives like myself." He ends his autobiography by saying, "After a continual searching for normal living, since high school days, and finding only frustration, and seeing, as I have seen, the sordid truth of what life can be, you eventually lose faith in life, here and hereafter. I have seriously considered whether or not it would not be more sensible to take my own life. But I guess I lack even the courage to do that, although I have tried to talk myself into it."

Six interviews, within two weeks, were devoted to intensive training in General Semantic devices, with very little discussion of his problems. At this stage he found a temporary full-time job. Then followed weekly interviews for two months to continue training in General Semantics and in progressive relaxation, with gradual application to present practical problems but avoiding any discussion of past life.

He improved steadily, but at the same time he was gradually developing resistance, because he felt I was dodging his main problems, the deeplying "complexes" which he thought were gnawing surreptitiously at his vitals. I refused to be dragged directively or non-directively into his search for "complexes." A particularly successful experience with the cup-drawing exercise from Wendell Johnson's list (2) made him realize that his complexes were mental constructs that fell under the general laws of thinking-feeling. He wrote: "I can work out my own salvation, rather than let you work it out." Two weeks later he left for a job in the Maritimes, taking Johnson's book to read. He had been there two weeks when he wrote: "As you know, I came to you frankly skeptical. There were many times during the consultations when I wondered if I was on the right track and many times when I wondered which of us needed psychological aid! At this point I am conscious of the possibilities you have opened up for me and which in their own good time I expect to materialize. The progress I have been able to trace thus far has been reflected not so much in 'big' changes, but rather in many, many little changes, perhaps unimportant in themselves, but highly important in total as they reflect a definite change in direction."

Five months later he came back for one interview and announced with a happy smile that he did not need my help any more. A recent check-up shows that his adjustment is very good, at work and outside.

#### Case 2.

M. C. male, twenty-two years of age (1946), single. Just graduated in Commerce. Unable to work because of a "heart trouble" that looks like angina, and described as being of a "nervous nature" by a physician who advised him to see a psychologist. Father died of angina pectoris when M. C. was seventeen. For the last three years M. C. "knew" he was going to die himself on reaching twenty-one. Symptoms much worse since he missed this appointment with death.

M. C. was a word-addict, cramped with set ideas, rigid views, and abstract theories. Once he had told his story, I gave him intensive training in progressive relaxation and General Semantic techniques in six interviews spread over ten days. No discussion of his problems. He lived out of Montreal and went home for a week. He came back for three more interviews, during which he was able to discuss his heart and his problems in a detached way. Two weeks later he came for one interview, reported good sleep and improvement of symptoms, and went to work the next month.

#### Case 3.

H. M. male, thirty-five years of age (1947), married, two children. Head of a firm established by his grandfather. Complains of "a feeling of inadequacy in certain situations, which is based on a fundamental failure to achieve satisfactory sex relations with my wife. Socially I am not adept. As far as any real help in learning or character formation, my parents were a total loss. I do not get satisfaction from my work. At the bottom I fear I will not be able to cope with the problems involved which all devolve on me now that my father is gone. As to life generally my look is pessimistic. My political sympathies, which are somewhat to the left of center, are opposed to my own interests in a business way. I have no strong religious convictions. I am not really sure of anything. At present I have doubts about being able to understand and apply some of the things you will tell me." H. M. is very superior in general ability. The Strong interest blank indicates that his pattern of interests does not coincide with his occupation, but it is practically impossible for him to make a radical change in his vocation.

We had weekly interviews for three months, during which he was trained in progressive relaxation and General Semantic devices, with application to simple everyday problems. After ten such interviews he reported a growing feeling of ease, security, and optimism which surprised him. At the end of the three months he felt that he could manage his problems by himself with one interview a month, and he undertook to read Wendell Johnson's *People in Quandaries* to round out his training. The monthly interviews were then taken up by reports of improvement in his dealings with people, in his sexual life, and in the development of his business. The self-doubts, the feelings of inadequacy, the political and the religious problems had simply faded out of the picture.

In the above cases I had to deal with what we may call complete reeducation, or a restructuring of the personality. This demanded the use of all General Semantic devices. It brought about a neutralization of former conditionings without spectacular abreactions, resistances, transferences, and so on. It brings psychotherapy within the field of learning which Dr. Clarence M. Hincks (1) justly described as our very own.

There are a great many minor cases, where the use of one or two simple General Semantic devices will greatly simplify and shorten the work of the psychologist. I refer particularly to indexing and dating.

#### Case 4.

M. F. has come back to live in a city where her childhood was crowded with very painful experiences. It depresses her and makes her awkward in her social relations. Dating makes her realize that City  $X_{1945}$  is not City  $X_{1925}$ , and that she is not the same in 1945 as she was in 1925. The problems clear up as if by magic.

#### Case 5.

H. T. is thirty years of age, married, mother of two children. She lives away from her mother, but her mother remains her big problem. She resents the way her mother brought her up. She thinks of her when she tends her own children; she hates

the clothes her mother sends to the babies; she lives day and night fighting with a ghost. We index and date the mother, calling her Mrs. Smith during one or two interviews. This throws the ghost out of the house, and H. T. lives in peace.

#### Case 6.

A personnel manager is all upset and ready to throw psychological tests by the board because two men who scored well above the critical points fail to measure up to expectations. We bring to bear the "etc." and the "chain-index" devices, applying them to simple situations well within his past experience. We come back to the two cases that have disturbed his peace of mind, and they do not worry him any more.

General Semantics is a method of undoing harmful conditionings and of preventing future psychological traumas. It is a neurological education, which corrects the early canalizations caused by experiences which the subject was not prepared to absorb without prejudice to his healthy functioning. It also corrects the neurological everyday language we use in evaluating life situations.

It is achieved by a childlike technique and drill, which has the most complex yet automatic beneficial consequences. It applies to even the most educated subjects, with whom other methods of "emotional" reeducation often prove ineffective or even harmful, for the very reason that they fail to break the vicious circle of unconscious identifications. It is based on the complete negation of absolute identity, as Einstein's theory is based on the negation of absolute simultaneity. It is a method of general re-education, making for general adjustment, sanity, and prevention, and not limited to a particular problem or to a particular area of behaviour. Because it deals with fundamental mechanisms, it has the tendency to spread its results over the whole organism at all levels, from physiological reactions to the higher mental processes. It abolishes infantile reactions and makes for full adult maturity.

It provides the psychologist with a set of simple and ready tools that he can use to correct false notions and unruly emotions of a minor nature.

#### REFERENCES

- 1. HINCKS, CLARENCE, M. "Psychology from the Standpoint of Psychiatry" (Canadian Journal of Psychology, 1, 1947, 192-5).
  - 2. JOHNSON, WENDELL. People in Quandaries (New York: Harper, 1946).
- 3. Korzybski, Alfred. Science and Sanity (Lancaster, Pa: The Science Press Printing Co., First Edition, 1933).

### THE ROLE OF THE CLINICAL PSYCHOLOGIST IN CANADA<sup>1</sup>

19

wi

cr

th

ch

ev

is

ful

ga

hy

ha

the

or

de

ali

ch

me

tio

SOC

lon

rac

the

div

"al

ist

bre in

the

on

be

stre

itie

MARY D. SALTER University of Toronto

Although psychology is functioning in many special areas with a widely recognized and gratifying usefulness, clinical psychologists tend toward impatience with the role assigned to them in clinical practice, a role which is confined commonly to the routines of psychological testing. The situation has been aggravated by the introduction of new techniques of personality appraisal, which extend the testing function far beyond the limits of psychometric determination of abilities, and depend not so much on the excellence of the instrument as upon the theoretical and practical background of judgment of the appraiser. It is not surprising that psychologists who are qualified to do an adequate job of appraisal are anxious to proceed towards effecting a change in the personality of the subject along lines suggested by the appraisal.

Our friends the physicians, psychiatrists, and social case workers view the psychologist's frustration with sympathy and misgiving. If they are sympathetic, they recognize that a sound theoretical background in psychology is pertinent to understanding human beings and helping them work through their problems. Their misgivings are of two main varieties, both with some justification. (i) They may point out that we lack the chief qualification for professional status in therapeutic work, namely, a supervised, well-ordered professional training and discipline. (ii) They may point out that the logical extensions of psychiatry and social work completely cover the field of counselling and psychotherapy. "In what area," they may ask, "do you intend to work, and what could you bring to that area over and above what the well-trained psychiatrist and case worker can now contribute?" They may go on to ask, "Why are you not content with the significant role of research worker in human personality development, carrying out research which would make invaluable contributions to our professional disciplines?" This paper attempts to answer these questions.

# WHY NOT BE CONTENT WITH RESEARCH?

We will attempt to reply to the latter question first. Inherent in the science of psychology at present is an ethical and practical mental hygiene implication. It would be a coldblooded student, indeed, who could study or undertake research investigation of psychological problems,

<sup>1</sup>Paper read at the Annual Meeting of the Canadian Psychological Association, Winnipeg, May 27-29, 1948.

without experiencing at least faint stirrings of desire to make practical use of some of the results of his study. Public attention is becoming increasingly focussed on the social sciences and psychology in the hope that they may be able to provide solutions for the pressing problems of human relations which confound our culture. It is difficult for the psychologist to resist altogether the plea for assistance which meets him on every side.

Perhaps even more pertinent to the question of the role of research is the danger of sterility in a laboratory science which has not access to full participant observation at the level of complexity it wishes to investigate. At least in the early stages of the development of a science, the hypotheses for research are nourished directly from the field of first-hand experience. If psychology is to contribute to an understanding of the dynamic principles of personality development and personality reorganization, the psychologist must have access to the settings in which development and reorganization are taking place. A science of personality is unthinkable at present if divorced from the clinical laboratory.

Let us, for the purposes of argument, grant that the role of the psychologist can with benefit be extended beyond the research and psychometric role. It immediately becomes necessary to attempt some distinction between the role of the psychologist and those of the psychiatrist and social case worker.

# DISTINCTION BETWEEN THE PSYCHOLOGICAL AND THE PSYCHIATRIC EMPHASIS

The traditional distinction between psychiatry and psychology is no longer tenable, since we no longer believe that we can divide the human race into two groups, one "abnormal" and meat for the psychiatrist, and the other "normal" and fair game for the psychologist. There is no sharp dividing line between the two extremes. All "normal" people have some "abnormal" characteristics, and vice versa.

The distinction between "normal" and "abnormal" can only be administrative. If a person is able to carry on in his everyday living without a breakdown necessitating complete or partial withdrawal from his job in order to undertake treatment, we might call him "normal," whereas the moment his disabilities become such a burden that he cannot carry on in his home or his job, we call him "abnormal." Better terms might be "adequate" and "inadequate."

We can assess any individual in terms of his assets and liabilities, strengths and weaknesses, abilities and disabilities. When the disabilities become so great that they outweigh the strengths, a person becomes inadequate, in that he is no longer able to function adequately

in his usual life setting. At that point he must seek aid of some sort. If aid is to be effective, either his life setting must be modified so that his disabilities are no longer disabling, or he must be relieved of his disabilities to an extent that will enable him to carry on in his usual setting, or perhaps both. I believe that neither function is the job of the psychologist. Our training and orientation do not prepare us either to cure disabilities or to manipulate the social environment.

When the strengths tip the balance, a person may be said to be socially adequate, despite the fact that his disabilities may present some source of disturbance or limitation of effectiveness. At this point, the chief task should be to increase his effectiveness and satisfactions beyond the minimum point of adequacy. There are two ways in which this can be done: (i) by giving further attention to the disabilities, or (ii) by helping the individual further to develop his abilities and assets. My thesis is that the latter is the primary role of the psychologist who leaves the academic halls and steps into the "treatment area." The field is crowded with disciplines geared towards the correction or healing of disabilities. and so busy are these disciplines with this primary task that they have little or no time to go beyond this towards the further development of potentialities. Although psychology is but one of many sciences which study the development of disabilities, it is the only science which turns primary attention to the study of "normal" psychological growth, learning, and personality development. Out of the main stream of academic psychology could grow the related applied discipline. Some of our techniques already have this emphasis. For example "mental" testing and vocational guidance are geared more towards the assessment and utilization of strengths than towards the detection and avoidance of strains or weaknesses. What challenge could be more congenial to the psychologist than that of working out ways and means of stimulating growth towards further maturity and fulfilment?

Does this argument mean that the psychologist can legitimately deal only with the adequate individual? By no means. Although it is true that often the disability is so totally crippling as to require that first attention be directed towards it, there is a point in the treatment process where one can deal simultaneously with curing the disability and developing strengths, the latter process serving greatly to facilitate the former. If the psychologist can offer methods of stimulating the growth of potentialities, he will have a valuable role to play not only in the out-patient department or clinic but in the psychiatric hospital or ward.

Thus, a distinction can be drawn between the work of the psychiatrist and the role of the clinical psychologist in terms of whether the chief emphasis is placed on the curing of disabilities or on the development of potential abilities and strengths. A clear-cut line of distinction here would be absurd; there would be some overlapping of function despite difference in emphasis. This need not be serious if good teamwork relationships prevail.

The distinction between the psychologist and the social case worker is less easily drawn, perhaps because both disciplines are in a fluid and formative stage where each is reluctant to set boundaries. One cannot enter into a discussion of this problem within the limits of this paper, but the problem is difficult and ought not to be ignored. Briefly stated, there is little in the field of counselling or therapy contemplated by the psychologist that the social case worker does not consider himself equipped to do as well or better.

#### APPRAISAL IN CLINICAL PSYCHOLOGY

My chief criticism of present-day clinical psychology is that it has neglected the challenge of the positive role. We have tended to ignore growth of potential, and have become almost completely absorbed by an interest in disabilities.

Let us consider merely the matter of appraisal, which at present is our chief role in the clinical field. The first personality inventories which appeared were designed most distinctly to answer the question, "Is there something wrong with this person?" Then by item-analysis or improved inventories we moved towards the detection of the areas of disturbance. Such inventories have been criticized as being mere atomistic enumerations of symptoms, which do not portray the individual as a dynamic, functioning whole. Both interview and projective techniques have helped the psychologist abandon this atomistic emphasis, but even with a holistic and dynamic orientation the psychologist tends to explore for disabilities and to mention sources of strength only in passing. In the field of testing we have moved from the use of scientifically developed psychometric devices, designed to measure both strengths and weaknesses, to a more clinical description focussed on weaknesses. Have we not tended to abandon our distinctive psychological orientation for a psychiatric one?

Good psychological appraisal should be more than a description of the symptomatology of the present state of the individual. It should go further than suggesting the various factors which may have led to the present pattern of symptoms. It should include assessment of potential for further development which can be taken into account in prognosis and treatment planning. Even with our present instruments, an emphasis in this direction is possible. More attention to this objective would lead to the improvement of present instruments and to the devising of new ones even more suitable for the purpose.

19

to

tra

pe

fo

ne

th

pi

de

SI

b

p

th

d

d

n

tr

a

b

10

ju

# PSYCHOLOGICAL THERAPY

The next question which must be raised is that of psychological therapy. If the task of the clinical psychologist is to develop assets and abilities, how is he to proceed? Let us examine the techniques which have been used by psychologists, to find out if any of them can serve as a basis for admitting the Canadian psychologist into the therapeutic role. Such techniques may be classified as specific or general.

(1) Specific Techniques. Let us consider the specific techniques in which some psychologists have been trained. These include speech therapy, remedial reading, therapeutic child training, vocational guidance, play therapy, group therapy, psychodrama, and others. In none of these fields have we any exclusive rights. We share them with social workers, psychiatrists, pediatricians, teachers, and various laymen without specific professional training. Even though psychologists have played a major role in developing all of these techniques, one would in Canada have difficulty finding clinically employed psychologists who are adequately prepared to make a contribution via any one of these special techniques, let alone several. If our contribution to the treatment area is to be by means of these special forms of therapy, it would behoove us to institute training towards this end.

(2) General Techniques. With respect to general techniques of therapy, there are at present two communicable techniques, namely, psychoanalysis and non-directive counselling, and a third uncommunicable technique called simply "psychotherapy." Let us consider each in turn.

(a) PSYCHOANALYSIS. Although the general goal of psychoanalytic therapy is to assist the individual to develop into a more skilled, independent, and mature person, this goal is approached through a direct attack on certain crippling disabilities which may be termed neurotic defences. This, according to our definition of roles, is a psychiatrist's job. In Europe, and more recently in the United States, there are a few lay analysts who are practising with apparent success and recognition. Such lav analysts are performing essentially the same role as the psychiatrist who limits himself entirely to psychoanalysis. They can function satisfactorily only as they themselves have personally consolidated their position with medical colleagues. In safety to themselves and to their patients they must work closely with medical and psychiatric diagnosticians. They are competent neither to use drugs which might be useful adjuncts to treatment, nor to conduct periodic physical examinations which might enable them to assess the progress of treatment in the case of psychosomatic disorders. Whatever the merits of the psychologists who are now practising psychoanalysis, there seems to be a growing feeling in the United States that only the medically trained person should be accepted as a practitioner. This feeling is perhaps even stronger in Canada, where psychoanalysis has obtained a foothold in only one or two centres.

(b) NON-DIRECTIVE COUNSELLING is quite another matter. Although neurotic defences may disappear in the course of successful therapy, they are not attacked directly. Rather, the therapist proceeds on the principle that if he stimulates the growth of the individual towards independence and maturity, the neurotic mechanisms tend to disappear spontaneously when they are no longer necessary. This would seem to be a legitimate technique for psychologists. We have by no means explored the limits of its applicability. It would be ridiculous to assume that it is for all time the universal psychological panacea; yet it is to date the only communicable general therapeutic technique which seems distinctively psychological. Despite this fact, there is to my knowledge no Canadian clinical psychologist who considers himself adequately trained in the use of this method.

(c) PSYCHOTHERAPY, a third method, is very loosely defined. It appears to be of two main varieties: psychoanalysis, which we have already discussed, and some mysterious, unformalized communication between therapist and patient which results in the reorientation of attitudes and motivation. It would be extremely difficult, except through long apprenticeship, for the psychiatrist to communicate to a student just what he does in performing psychotherapy, and in this sense it is an uncommunicable technique. In any event, the psychiatrist considers "psychotherapy" his preserve, and it is probably not too extreme to state that as long as the clinical psychologist describes his therapeutic role as "psychotherapy," he will meet resistance from his medical colleagues on the grounds of duplication of function. Let us find another name for our therapeutic function, be it "psychological therapy," "psychological counselling," "psychological training," or something similar.

To sum up the present position of the Canadian psychologist in the treatment area: there are certain special techniques, as well as non-directive counselling, which would seem to be appropriate to the work of the clinical psychologist and useful in the clinical setting, but in which our present clinical psychologists are generally untrained. Psychoanalysis does not seem to be a legitimate technique for the clinical psychologist according to our definition of role. "Psychotherapy" would seem to be a good term to avoid, and in any event we most certainly are not trained in it, either formally or by apprenticeship. Our position in claiming a therapeutic role seems weak indeed.

If we are to claim a part in treatment, it would seem that we must

19

se

ne

sp

de

or

se

be

er

in

4

th

in

01

in

aı

re

of

ti

si

ag

pl

re

ti

to

CO

m

re

at

as

ne

CE

ei

gr

le

de

turn our efforts in two directions. (1) We might well see that our clinical psychologists are trained in appropriate techniques which are already known, such as non-directive counselling, vocational guidance, play therapy, group therapy, psychodrama, speech therapy, and the like. (2) We should attempt to develop further communicable techniques based on our own legitimate orientation towards healthy personality development. I stress the words "communicable technique," for I am convinced that implicit in our whole academic training is an emphasis which enables us, provided we ourselves are reasonably well-balanced and experienced, to contribute to personality growth. Insofar as we, as individual counsellors, have been successful, which some of us have been indeed, it is this emphasis which accounts for our success. However, it seems desirable through considerable further study and experimentation to formalize our techniques so that they may be communicated to the student with a minimum of fumbling.

Thus we require training in present known methods of therapy, and research in new methods appropriate to our positive emphasis on growth and development. In both of these endeavours we must rely heavily upon the good-will, co-operation, and downright assistance of other professional groups. This, I am convinced we can obtain, and with enthusiasm, if we can present a reasonable draft of the role we hope eventually to play, shaping such a role to supplement and support, rather than interfere with or attempt to supplant, the roles of these other groups.

#### RESEARCH

We started this argument with the question, "Why are you not content with research?" In concerning ourselves with reasons and means for extending our activities beyond research, we must not overlook its importance. One of our chief motives for wishing to participate in the field setting is the desire to invigorate our research by bringing from the field fruitful hypotheses to guide our scientific efforts in exploring the development of the human individual. We cannot afford to leave this a pious rationalization for our desire to play the "helping role." The proposed role of the clinical psychologist must, if it is to include therapy at all, be a triple one of appraisal, therapy, and research.

It is well recognized that the human individual must be studied as a whole and in relation to his environment if he is to be understood. He is a physiological-psychological-sociological entity. He cannot be understood comprehensively as a physiological mechanism, nor as a unit of society, nor for that matter solely in terms of personality dynamics. Because of the vast range of scientific knowledge involved, it seems obvious that we require dovetailed, co-ordinated, and integrated re-

1949]

search to which various scientific disciplines contribute. Psychology is needed in field research to hold a central position as a "bridge science," spanning the gap between the biological and social sciences. For the development of psychology some of us at least must get out of the laboratories and into the field; and because our contribution to field research is focal, it is for this potential contribution that we will perhaps be most welcome in the clinical setting. We cannot afford to drop the emphasis on research from any professionalized training we may establish in future; indeed we should probably increase this emphasis.

### IN WHAT SETTINGS CAN THE CLINICAL PSYCHOLOGIST WORK?

The final questions to be considered are those of "where?" and "how?" Where and how can the clinical psychologist play to advantage the triple role of appraisal, therapy, and research? Can we best work in private practice or in psychological clinics? In psychiatric hospitals, outpatient departments, and general hospitals? In social agencies? Or in clinics which are jointly operated by psychologists, social workers, and psychiatrists on a team-work basis? Should the clinical psychologist reach out into industry, schools, universities, government services, and other such institutionalized settings? And in all of these possible settings how are we to co-ordinate our efforts with those of other professional disciplines and with administrative personnel?

(1) Private Practice. In my opinion there is a great deal to be said against private practice. The psychologist is only too ready to criticize the physician who views the patient only as a physical machine without regard for the psychological aspects of motivation, emotion, and attitudes. The psychologist can equally well be criticized if he attempts to deal with a patient solely in terms of personality dynamics, without consideration of physiological function, or as isolated from his social milieu. It is no imaginary danger that the psychologist might fail to recognize disorders which require immediate medical or psychiatric attention, or could best be dealt with by combined therapies. Insofar as the psychologist assumes a professional role he will be held responsible for errors of neglect or ignorance, even though his treatment does not pretend to cover the physical or psychiatric. We cannot exist in private practice on any sound basis without complete freedom of reciprocal referral with the medical profession. Reciprocal referral will be entered into by the medical profession only with other professional groups in which it has confidence, and although certain individual psychologists may have obtained the confidence of their medical colleagues, as a professional group in the treatment area we have not yet done so.

It is my opinion that we can be secure in our status and sound in dealing with our public only if fully recognized by the medical profession. Certification alone might help to safeguard our status and the public in matters which do not pretend to deal with therapy, such as vocational counselling. However, when we attempt to deal with personality maladjustment we find ourselves in more dangerous territory. To safeguard ourselves and the public we should confine our efforts to patients referred to us by the medical profession, at least until we have won sufficient confidence to make reciprocal referral possible.

(2) Psychological Clinics. We can build up a fair argument for psychological clinics, established primarily for training and research in appraisal and therapeutic methods, and geared to serve the "adequate" population with which our positive orientation best prepares us to deal. However, the same argument applies to psychological clinics as applies to private practice. They cannot exist on a healthy basis without recognition by the medical profession and freedom of reciprocal referral.

(3) Team-work Settings. This brings us to our third group of field settings, namely those in which some combination of physician, psychiatrist, social worker, and psychologist are already employed on a more or less hierarchical team-work basis, as in psychiatric hospitals and wards, general hospitals, health services, mental hygiene clinics, outpatient departments, social agencies, and the like. Such settings would seem to be our best hope of development, since team-work relationships seem essential if we are to play our proper role.

From the viewpoint of the clinical psychologists already employed in these settings, the focal problem appears to be one of status. This problem seems important chiefly because of frustrations in extending the psychological role in the treatment area. The psychiatrist does not as a rule ask the psychologist to participate in therapy because he does not see what distinctive contribution the psychologist can make. The frustration attendant upon this limitation of function is sometimes aggravated by real or imagined indignities which make the psychologist feel relegated not only to a limited role, but also to an inferior one. To such frustrated psychologists freedom of action in an independent role seems very appealing. An apparent dilemma arises between freedom with isolation and team-work with frustration. This is only an apparent dilemma, however, for team-work, which is essential, need involve neither frustration nor inferiority of status. There seem to be two chief solutions to the apparent dilemma, namely the development of a distinctive contribution, and the adoption of the consultant or advisory role.

(a) DEVELOPING A DISTINCTIVE CONTRIBUTION. Fundamental to the present dilemma is the already well-laboured point that the clinical psy-

1

r

1-

chologist is usually without a unique contribution to make to the team, except for psychometrics which he scorns as an inadequate role, and research which he tends to neglect. It is our firm belief that the various recommendations previously suggested would do much towards rectifying this situation, namely, (i) further training in therapeutic techniques already available, (ii) further emphasis in developing appraisal skill towards identifying sources of potential, which, since they contribute significantly to problems of treatment, bring us much more intimately into the treatment area, and (iii) research, particularly research which may throw light upon new therapeutic methods to facilitiate personality growth. The onus for initiating these steps must rest in part upon the individual clinical psychologist. It is our opinion that in direct proportion as he takes these steps towards making a more distinctive contribution, his problems of status will tend to disappear.

(b) THE ROLE OF CONSULTANT OR ADVISOR. It is our opinion that, until such a time as clinics may be established which have complete joint direction by representatives of the various professions, there is only one alternative to the technician. That is the consultant or advisor. It is the only alternative, since the clinical psychologist is obviously not equipped to play a completely independent part such as would be involved in taking over responsibility for a hospital ward and directing all aspects of the treatment programme in the psychiatric setting, or handling all aspects of a case in a case-work agency. The only role which we can play in the present team-work setting with independence, dignity, and freedom is that of consultant or advisor. It is a comfortable role, with considerable status and influence, but with distinct responsibilities and limitations.

In the first place, the whole reason for the being of the consultant is that he has a valuable professional opinion to offer. The psychological consultant would be expected to give a psychologist's opinion, which, although it might contribute to psychiatric diagnosis, for example, would not properly be a psychiatrist's opinion. Secondly, a good consultant will so frame his opinion that it is intelligible and useful to the person who requested it. He therefore will have so familiarized himself with related disciplines, with the administrative setting in which they are working, and with the circumstances of the patient himself, that his opinion will be relevant to the problem and to possible methods of treatment. Third, the consultant may well be trained in the methods of therapy specific to his speciality. If so, it will be proper for him to recommend such of these methods as may be appropriate to the case in hand. Finally, the consultant gives opinions and makes recommendations, but has no authority to undertake any executive action, except upon invitation.

S

S

e

fi

tl

a

a

SI

I

in

a

th

de

ar

as

lit

bo

We

tha

It

po

It is quite clear that the influence which a consultant brings to bear is in direct proportion to the respect given his opinion by his colleagues, which, even in a well-established profession, is something that is built up gradually as others learn to value his gradually accumulating training and experience. It is not a status which can be bestowed by issuing a certificate or by an Act of Parliament. Few, if any, of us in clinical psychology have had sufficient training and experience to act as consultants at the highest level. It would seem important, however, that we move in that direction.

(4) Front-line Settings. If psychology's chief contribution to the applied field is to stimulate potential for further growth, and to cure only indirectly through retraining, the population which is our chief concern is unlikely to be found in psychiatric hospitals and clinics. By the time an individual reaches a point of inadequacy sufficient to prompt him to seek psychiatric treatment, it is only too likely to be necessary to cure disabilities before any progress can be made. The population which interests us most will be found in schools, universities, industries, armed services, and so on. How can psychological service be made accessible to people in these settings, so that they may seek assistance at a stage where we can be of legitimate help? The best that we can hope for is a rapprochement, in which those who are responsible for personnel and policy become imbued with psychological principles at a diffuse and layman level, and in which there is an extension of mental hygiene clinic service to which our workers would refer personnel. Such a clinic service would still be on a team-work basis, but one in which the clinical psychologist might well play the most significant part because of the population served.

### GENERALIZED VS. SPECIALIZED TRAINING AND APPLICATION

Psychology is thus caught in another dilemma of generalized vs. specialized application, owing to the very breadth of the potential field of application. In universities we have rather tended to emphasize the generalized diffusion of psychological knowledge among potential leaders in the community, in the hope that our humanitarian purpose would be fulfilled thereby. However, a proper solution to the problem of specialization is necessary if we do not wish to have our efforts so diffuse as to be ineffective. This raises the question of training. If the universities are more interested in diffuse application than in the development of a professionalized specialty, where is the would-be clinical psychologist to turn for training? On the other hand, if the universities are to turn departments of psychology into professional schools, what will happen to the hope of broad dissemination of psychological

principles through general arts courses, courses to professional faculties, extension courses, parent-education courses, and the like? And if either is emphasized at the expense of research, what is to become of psychology as a science, upon which all applications essentially rest?

We have not solved the problem of specialized training in Canada; we have met it only half way. We have been producing shalf-professionalized psychologists as B.A.'s from specialized honour courses, as M.A.'s and even as diffusely trained Ph.D.'s, who if prepared professionally for any job are trained for teaching in a university psychology department. These half-specialized psychologists are highly motivated to spread the psychological gospel, but lack the professional knowledge or discipline which will enable them to do this effectively at a professional level. We have not even managed to turn out effectively trained and motivated research workers who can enter the applied fields as scientific specialists. If we are to train psychologists who can make an effective contribution in clinical psychology (or in any other applied field for that matter) at the consultant level, it would certainly seem that more advanced and deliberate professionalized training should be provided. For adequate training of the clinical psychologist, it would appear that we need a professional Ph.D. training for the triple role of appraisal, therapy, and research. This does not imply that our halfspecialized B.A.'s and M.A.'s have no valuable contribution to make. I am not ready to defend the position that no one can work effectively in the clinical field without a specialized clinical Ph.D. But we do need a number of such professionally trained psychologists who could give the whole clinical psychological team a consultant status that would do much to overcome the present frustrations and limitations, which are not only felt keenly by the clinical psychologists themselves, but which are truly interfering with the development of clinical psychology as a service and as an important branch of psychological science.

#### SUMMARY

(1) In Canada at the present time, psychiatry and social work leave little room for clinical psychology as a therapeutic discipline.

(2) Nevertheless, clinical psychologists desire the therapeutic role, both on personal grounds of humanitarian interest, and because it is essential to the further development of the science of psychology that we have participant access to the field laboratory.

(3) In order to be welcomed to the field of therapy, it is necessary that the clinical psychologist have a distinctive contribution to make. It is believed that this contribution is the stimulation of growth of potential abilities, strengths, or assets, rather than the healing of dis-

abilities, and that this distinctive psychological emphasis can be made not only through therapy but also through appraisal and research.

(4) Our present methods of training clinical psychologists are inadequate, since we have not equipped them with even the known therapeutic techniques which could contribute to the stimulation of growth. It seems highly desirable to emphasize professional discipline in known communicable techniques and research into new and even more effective methods.

(5) Research should be fostered both in the interests of developing new techniques, which will give us entry to the clinical field in a more responsible role, and to enrich the science of psychology with hypotheses and material brought in from the field laboratory. Research emphasis will serve to make us welcome in the clinical setting since psychology is a "bridge science" in studying the physiological-psychological-sociological individual.

(6) In our training and in our field of eventual work we are highly dependent upon the co-operation and respect of other professional groups, especially the medical profession. In order to safeguard both our own status and the public, we must have freedom of reciprocal referral with the medical profession. This would seem to involve working on a consultant or advisory basis, accepting only referrals from the medical profession, and this again is contingent upon having a distinctive contribution to offer.

(7) Therefore, it would seem that the clinical psychologist can best function in a team-work setting where other professional groups are represented. Present frustrations in the team-work setting can only be overcome, (a) by developing a more distinctively psychological contribution, and (b) by attaining as individuals or as a service a consultant role. Status in a consultant role depends upon training and experience, and close enough team-work that the competence thus derived is recognized by colleagues in other professions.

(8) The clinical psychologist can work towards a consultant role both through further training (self-directed if necessary) and through exercise of the advisory role in his present capacity.

(9) The consultant role generally would seem to be the appropriate function of a specialized and/or professional psychological service, considering the broad area of application possible for psychological science.

(10) University departments of psychology can resolve the dilemma of generalized vs. specialized application by relying upon undergraduate education in psychology to provide the diffuse application through other professions and executive positions, and by providing specialized professional education at the graduate level.

### PREDICTING THE BEHAVIOUR OF INDIVIDUALS1

DONALD SNYGG Oswego State Teachers College

PSYCHOLOGY came out of the Second World War with a greatly enhanced prestige, and today the demand for psychological services taxes the profession far beyond its resources. It is gratifying, of course, to be appreciated, but we must not let ourselves be blinded to our limitations. We must recognize that today we are expected by the layman to perform many wonders which we might well be proud to perform after two or three hundred years of further progress.

We claim that psychology is a science because it uses the scientific method. Scientists in other fields have tended to laugh at our pretensions, but many of them are now coming to give us grudging recognition. Of course, psychology is not a science in the sense that physics and chemistry are sciences. It is a science and we are scientists only because we make a practice of submitting our theories of behaviour to the test of controlled experiment. It is not a science in the sense of making possible the accurate prediction of the behaviour of any given individual in any given situation. Yet prediction of behaviour is the service in which many of us are employed. Those of us who are clinical psychologists, educational psychologists, industrial psychologists, in fact almost all workers in the applied fields of psychology, frequently find it necessary to predict the behaviour of individuals. Unless we can predict how a given individual will behave in a specific situation we cannot know how to treat him or how to educate him.

But the conventional laws of psychology do not refer to specific individuals at all. They are normative principles which help us to predict what the "normal person," "the average adult," or "the typical twelve-year-old" will do, "other things being equal." These rules come equipped with coefficients of correlation and standard deviations to express their probable degree of error when applied to a specific person. That probability of error is usually very large because the "normal" adult and the "normal" child do not exist as individuals. They are abstractions who do not come to our clinics. We never seem to find them in the schools. The people we actually see are specific individuals; and it is their behaviour which we have to predict. The problem of psychology is to find some way of doing it.

This is a large order. In any frame of reference now used, the behaviour of living organisms seems to be conspicuously irregular and variable. But, as scientists, we cannot accept this irregularity as final.

<sup>1</sup>An address delivered at a meeting of the Ontario Psychological Association, Toronto, Canada, January 31, 1948.

ł

19

ha

as

it

W

gı

h

eı

o

b

re

b

la

e

p

t

0

It is our task to find some way of reducing the behaviour of individuals to regularity and order. Until that is done the accurate prediction and effective control of the behaviour of individual human beings will be a matter of chance, and will be accomplished only rarely.

Now we believe that this is an ordered universe and that what appears to be unpredictable appears so only because of the limited nature of our knowledge. We believe that the behaviour of living organisms is inexorably lawful and not governed by blind chance. In the history of science we can find two major ways of seeking order among a group of phenomena in which order is suspected but not apparent. We might call them the Ptolemaic method and the Copernican method. The Ptolemaic method, when it encounters disorder, adds new causal concepts to the original frame of reference in order to explain the irregularities that appear. The Copernican method, on the other hand, abandons the old frame of reference altogether, and aims at the discovery of a new point of view which will reduce the phenomena in question to regularity and order.

For the last three centuries the method of psychology has been Ptolemaic rather than Copernican. The efforts to piece out the external frame of reference of the physical sciences with enough auxiliary causal concepts to explain the individual variations in animate behaviour have taken two main forms. The first was Descartes' concept of mind. As an explanation of an individual's behaviour it was quite convenient, because any person's "mind" was inaccessible to observation and could therefore be endowed with the properties needed to explain any act; but because it was an inaccessible area in the causal field it could not be used for prediction. The second causal agent, the physical organism, is philosophically much more satisfactory, because its use enables us to ascribe all causation to the objective physical field, of which it is a part. However, it is of very limited value for predictive purposes outside the laboratory. At the present time we lack both the instruments and the methods required for detailed studies of the causal conditions within the organism; consequently these conditions cannot be used for the prediction of behaviour. Even when more precise and effective methods of observing physical changes within the organism are perfected the conditions will have to be described in neurological, chemical, and mathematical terms, and these will still have to be translated into behavioural terms before they can be used for the prediction of behaviour. At the best it will be a task comparable to that confronting a team of meteorologists in making up a weather forecast; at the worst it may turn out to be impossible. In any case it will be an operation which can never be performed outside the laboratory where the required instruments are available.

1949]

Now the observation of regularity or of lack of regularity in behaviour is as much a function of the observer and his frame of reference as it is of the behaviour itself. When we feel our railroad coach moving, it may be because we are leaving the station; but it may also be because we are watching a moving train on the next track. There are grave grounds for suspecting that the relative unpredictability of individual human behaviour may be due to our use of an unsuitable frame of reference rather than to any essential unlawfulness of the behaviour itself.

Now that the physical sciences themselves are using other frames of reference and are validating non-Euclidian geometry with the atom bomb, it seems hard to believe that the Galileian-Newtonian frame of reference could ever have seemed a possible basis for predicting the behaviour of individuals. In the first place it secured its character of lawfulness and regularity by purging its field of all those aspects of experience upon which competent observers could not agree. A comparative judgment of the length of two objects laid side by side, made from the standard position for comparison, is about the only judgment on which two different people are almost certain to agree. As a result the world of physical science, after Galileo, consisted of only those aspects of phenomena which are reducible to length. The field of each observer had to be purged of individual meanings and characteristics so that agreement could take place. And in such a field there is no cause for individual deviations in behaviour. Every observer, apart from differences in position, experiences this situation in the same way and, if it were the sole cause of behaviour, all people in the same physical situation would behave alike. If it is to be used as a causal field for explaining individual behaviour other agents must be brought in from outside to explain the individual features of behaviour. I have already alluded to the uselessness of these proposed agents as aids to prediction.

Schrodinger (20), writing as a physicist, has recently given us another reason for distrusting the use of the external physical frame of reference as a potential means of predicting the behaviour of living organisms. He points out that the laws of physics are all derivations of the Second Law of Thermodynamics (entropy principle), of the tendency of matter to go over into disorder. Living organisms have as their essential characteristic the creation and maintenance of order, the avoidance of entropy. A dead organism obeys the laws of physics and subsides into thermodynamic equilibrium; a living organism does not. Its behaviour is therefore not amenable to prediction by the present laws of chemistry and physics. In the face of these difficulties it seems desirable for psychologists who are interested in dealing with individual behaviour to try the Copernican method and explore the possibilities of other frames of reference. The one I propose to discuss is the phenomenal field of the behaving organism.

19

tic

ev

sk

ex

Ca

aı

in

gi

e

E

fi

p

tl

b

In contrast to the behaviour of inanimate objects, which must be studied from the point of view of an external observer, the behaviour of living organisms can also be studied and predicted from the point of view of the organism itself. This is nothing new. It is essentially the common sense approach which is used by most people in understanding and predicting the behaviour of the people with whom they are dealing. "What does he think of that?" "How does he feel about it?" "How does he feel today?" It is used in the same unscientific manner by most psychologists. When our laws of normative behaviour fail us we turn to this approach. No matter how much we know about the relation between juvenile delinquency and such objective factors as family income, I.O., and occupation, when we are actually dealing with a delinquent boy we are almost certain to wonder what he thinks of himself, his home, and his parents, and otherwise attempt to see the situation from the point of view of the boy. As the impact of the relativistic point of view in science begins to be felt in psychology, this personal field of the individual is coming more and more to be seen as a valid field of psychological causation.

In an unpublished manuscript Carl Rogers has listed Angyal (2), Maslow (11), Mowrer and Kluckhorn (14), Lecky (9), and Masserman (12) as writers who have recently approached the problems of personality from this general point of view. To these we can now add Gardner Murphy (15) and Rogers himself (18). Krechevsky (8), Leeper (10), and Snygg (22, 24) have used this approach to the psychology of learning, as has Hilgard in his most recent analysis of the subject (7). Bartlett's classic on Remembering (3) is purely phenomenological, as is the less well-known but important research on the same subject by Wees and Line (27). Lewin and his colleagues, and more recently Sherif and Cantril (21), have demonstrated the usefulness of this approach to social psychology. Among the clinical psychologists who explicitly base their theory and practice upon the client's personal field we can name Raimy (16), Combs (25), Rogers (18), and Rosenzweig (19), but there are scores of others. Gordon Allport with his personalistic psychology (1) and L. K. Frank (5) with his "private worlds" have been using the same frame of reference for several years. In the field of industrial psychology Elton Mayo (13) and F. J. Roethlisberger (17) have discovered and presented eloquently the principle that the most potent factor in the production rate of a worker is not the physical conditions in his environment but the meanings which he ascribes to them. The outstanding classic in the field of driver psychology, the field-analysis of automobile driving by Gibson and Crooks (6), uses the same frame of reference to deal with behaviour which is inexplicable in terms of the physical field. In all this wide variety of psychological fields the personal frame of reference functions as an instrument of prediction better than anything else we have ever tried.

In the rest of this paper I propose to push this approach further by sketching out the major principles and laws of psychology which would exist in a purely phenomenological frame. This is not hard to do, because a great number of facts about the personal field of the behaver are already available. When we enter this territory we are following in the footsteps of James, Freud, Adler, Piaget, the Gestalt psychologists, and many others who have found it necessary to explore the experiential fields of their subjects and have mapped them for our use. Each of us always has available for observation one other phenomenal field, his own.

As we proceed to examine the utility of the phenomenological approach for prediction of individual behaviour we must bear in mind that the "facts" and principles of this frame of reference will necessarily conflict with the "facts" and principles of the external frame of reference. In some cases the phenomenological picture of behaviour will be the exact opposite of the non-personal picture. In choosing between the two points of view we must ask only which one is the more effective frame for the prediction of human behaviour. It may be that one will prove more useful for some purposes, the other for others. However, in any one prediction we must stay wholly within the framework of one or the other. The facts derived from the two points of view are not co-existent and cannot be mixed.

We must begin by making two basic assumptions. The first is that all behaviour is lawful. The second is that the behaviour of an individual is completely determined by the phenomenal field at the moment of action. As the individual sees it, his behaviour is caused, and the causes lie within the field of experience which he takes to be reality. No matter how irrational his behaviour may seem to others who are using their own phenomenal fields as the frames of reference, he feels that his behaviour is a reasonable and necessary result of the situation in which he finds himself. It may, in retrospect, seem silly or ineffective, but that is because by that time his field has changed.

This assumption of complete causal relationship between the behaviour of an organism and its phenomenal field at the moment of action would not have stood up a generation ago when the field of consciousness was thought to include only those highly differentiated aspects of awareness which can be verbalized in the laboratory. In such a field individual behaviour would be very precise and completely logical, and we know now, after Freud, that it is not. Nor would our assumption stand in a frame of reference in which the causal field is divided, as Freud assumed, between one field of which we are highly conscious and another of which we are unconscious. Psychologists who

18

e

m

in

g

(1

c

in

n

al

th

SE

SE

to

fr

p

fr

li

aı

th

g

cl

0

h

fi

al

g

T

fa

C

in

b

p

h

al

adopt this system are forced to base their predictions of individual behaviour on two completely different causal fields, with resulting confusion and uncertainty. However, the studies of the Gestalt psychologists on the nature of the phenomenal field have removed both of these difficulties. The perceptual field, they have shown, is not an all-or-none field of consciousness or unconsciousness. It is a unified area of figure-ground phenomena of which the individual is more or less conscious. In such a field the behaver's belief that there is a one-to-one relation between his field and his behaviour becomes completely reasonable. The unified nature of behaviour is a function of the unified nature of the field of which it is a part. The precise aspects of behaviour are aspects of the precise and highly differentiated "figure" parts of the field. The vague and fuzzy aspects of behaviour are aspects of the field.

On this basis psychology has available a causal field and frame of reference for individual behaviour in which behaviour and cause have the one-to-one relationship which makes accurate prediction theoretically possible.

The process of prediction is as follows: (1) from observation of the individual's behaviour we can, by inference, reconstruct his field; (2) if we can discover what phenomenal fields are like and why they change we can project his future field; (3) from that future field we can predict his future behaviour.

The critical point in this process is the second step. The Gestalt psychologists, the reports of counselling clients, and other sources have given us a fairly good description of the field. The main problem on which immediate work is needed concerns the discovery of the dynamics of change within the field. At the present time it seems safe to state the following principles:

1. Although the content and organization of phenomenal fields vary from individual to individual and from time to time, the phenomenal field is always organized and meaningful. Reproductions of tachistoscopic material are never the chaotic masses of unrelated stimuli that are postulated by objective theory.

2. The phenomenal field at any given instant is the result of a process of selection. Material which is inconsistent with the existing organization is either not accepted into the field or is modified in such a way as to make assimilation possible. (Cf. the Freudian mechanisms and Lecky's concept of self-consistency).

3. The organization of the field at any given time is pertinent to the need of the individual and the activity by which he is trying to satisfy it. The field of a professor playing golf is very different from the field of the same professor engaged in teaching a class or in conversation with his wife. In each case the aspects of the field which emerge into figure are those which are pertinent to the activity of the moment, and the perceptions and memories are those which have a bearing on that problem. If thoughts of the lecture intrude into the golf game or thoughts of his wife intrude into the lecture it is only because: (1) the intruding activity has phenomenally not been brought to a conclusion and from his point of view is still in progress, and (2) the intruding activity is more important to the satisfaction of the individual's needs than the activity in which he is formally engaged.

4. The basic need, in a phenomenological system, is the maintenance and enhancement of the phenomenal self. Human beings are aware of themselves, and the self they are trying to maintain is not the physical self but the self of which they are aware, the phenomenal self. Since they are also aware of the future and need to maintain themselves in future they seek to enhance themselves to insure their ability to do so.

Incidentally, the individual human being who emerges from this frame of reference is very different from the passive puppet who is pushed here and there by chance environmental forces in the external frame of reference. From the phenomenological point of view he is a living organism persistently striving for self-maintenance and growth, and actively exploring his field for means of satisfying this need. If this frame of reference finds acceptance among psychologists on any great scale we can look forward to drastic changes in educational and clinical procedures.

In theory the phenomenological approach offers several advantages over the external approach as a means of predicting individual behaviour.

1. It deals with the behaviour of the individual in his individual field. Thus it brings all behaviour, normal and abnormal, typical and atypical, within its frame of reference. Its laws are therefore laws which govern the behaviour of all individuals, and not typical individuals only.

2. It ascribes the determination of all behaviour to one causal field. This avoids and makes meaningless many persistent insoluble problems faced by the external approach.<sup>2</sup>

3. It postulates a complete and regular relationship between the causal field (the phenomenal field) and behaviour, making possible the inference of one from the other. This is not true of the external approach, because none of the suggested auxiliary fields, whether the mind, the physical organism, or its past environment, can be inferred from behaviour; nor can they lead, at the present time, to accurate inferences about individual behaviour.

Indeed, the relation between the phenomenal field and behaviour is relatively simple and well known, even to laymen, because of the life-

<sup>&</sup>lt;sup>2</sup>The body-mind dichotomy and its resultant problems, for instance.

h

t

p

g

fi

0

h

16

b

b

ol

p

fie

ac

re

al

W

je

OI

le

in

sh

th

of

long experiences available to all people to observe the relation between their own field and their own behaviour. As a result, the process of reconstructing an individual's phenomenal field from observation of his behaviour is a relatively simple and easy task and can be done with little training.

Usually, when we see a man scratch we can infer that he itched. When we see him yawn we often share his field so vividly that we are impelled to copy his behaviour. The fact that this method of inference from behaviour requires no instruments is not the least of its advantages. When the man with whom they are conversing fiddles with his watch all but the most eager and obtuse people can infer that he is impatient for them to leave and they will do so without waiting to take an electro-encephalogram reading or measures of his heart-beat and blood sugar.

The operation is of the common, "Now why did he do that?" or "Under what circumstances would I have done that?" character. As applied by a naïve observer to an animal or a member of an alien culture this method may yield erroneous results in the initial stage, but when the inferred field is checked by subsequent behaviour the necessary corrections are usually apparent at once. This principle operates in animal psychology as well.<sup>3</sup>

4. Inferences about the nature of the phenomenal field can thus be checked and modified in the light of subsequent behaviour. This not only gives the psychologist using the phenomenological approach a method of successive approximation which can lead to very accurate reconstructions of the phenomenal field, but it also makes the method objective in the sense that a number of observers can independently come to the same approximation of the subject's field. Friends and relatives, without training, use this method very successfully in predicting and controlling the behaviour of specific individuals and we see no reason why psychologists, with training, cannot do it better.

5. Since the relation between the phenomenal field and behaviour is one familiar to all persons through their experience of their own fields and their own behaviour, the causal concepts are readily understood by laymen. This should result in the more rapid training of workers and in more effective communication between psychologists and counsellors using the phenomenological approach, and their clients and the public. It also makes the findings of phenomenological psychology immediately accessible and useful to workers in other sciences.

6. As compared with the external approach, the phenomenological approach is more inclusive. Individual behaviour cannot be predicted from normative behaviour. On the other hand, accuracy in predicting

<sup>&</sup>lt;sup>3</sup>Snygg (24). For other instances of the use of the phenomenological approach in prediction of maze behaviour, see Snygg (22).

individual behaviour makes possible the prediction of normative behaviour as well.

7. At the present time it appears that the laws and concepts necessary to explain and predict behaviour in the phenomenological frame of reference are much fewer than the independent principles which are necessary to explain behaviour in the external frame of reference. If these explanatory principles and concepts stand up under further experimentation the field of psychology will be greatly simplified.

As a point of departure for estimating the potential effectiveness of the phenomenological approach in the prediction of human behaviour we may take the findings of Sorokin and Berger (26) that individuals can predict accurately about 80 per cent of their activities for the next twenty-four hours. These predictions naturally were made by the individual on the basis of his own phenomenal field, and it might be assumed that an outside observer, basing his view of the field on inference, might not do as well. As a matter of fact the observer using the phenomenological approach can often do much better than the subject himself.

He cannot, of course, reconstruct the subject's present field with the richness, warmth, and detail that it actually possesses. His most precise approximation of that field is only a plan or schema of its general characteristics. But, in drawing inferences about the future field and the future behaviour of the subject, he enjoys two advantages over the subject. For one thing, the observer's field includes not only his approximation of the subject's field but a great deal of other knowledge as well. The subject's predictions of his future behaviour are based upon his present field exclusively, but the observer, with a broader field, can often predict, as the subject cannot, impingements of new experience and their effect upon the field. Johnson, secretly planning to punch Smith in the nose, has knowledge of Smith's future field and, therefore, of his behaviour, which is not, at the moment, accessible to Smith. Of course, he cannot accurately predict Smith's response from this knowledge alone. But he does have information about the future field which is denied to Smith, and, if he knows him well, he can predict what he will do when the predicted event occurs.

The observer has one other advantage over the subject. The subject is a prisoner within his own present field and is sharply aware only of the present figure. Material in the ground is at such a low level of awareness that it is available only in the form of vague feelings and "hunches," if at all. Even if the ground material has been in sharp figure in the past, it has very little influence at the moment. On the other hand, the observer, if he has had an opportunity to study the individual's phenomenal field in the past, is aware of a great deal of this material, once figure and now ground, which is out of the sub-

ject's reach at the moment, but which, under predictable conditions under the stress of another situation will emerge into figure again. In other words, the behaver himself can be aware only of his present field; the observer, who has his own field, can be aware of much of the subject's ground material which provides most of the raw material for the future field. Furthermore, since the observer can view the subject's field unemotionally, without personal involvement, he can be aware of the subject's characteristic distortions and use this knowledge in predicting the kind and degree of distortion of new material. The subject, again, cannot do this for himself because to him the distorted field is reality. When we add to these advantages the one that the observer always has, by virture of his role, a field that is more comprehensive than the field of the subject, it would seem that the theoretical possibilities of predicting individual behaviour by phenomenological methods are almost unlimited, and that, under favourable conditions, the effectiveness of prediction should be considerably higher than that achieved by Sorokin and Berger's subjects in predicting their own behaviour.

I want to make it clear that I am not advocating that psychology abandon the use of the external frame of reference altogether. It does fulfill a function in predicting mass behaviour. Physics still has to use more than one frame of reference to predict the behaviour of light and it may be that no one frame of reference will answer all the problems of psychology. But we do need to find another frame of reference for predicting the behaviour of individuals. The finding of Elkin (4) that, of twelve psychologists interpreting a case study, "only one gave a theory which might be considered derived from the laboratory" is a serious indictment of a profession which purports to base its procedures on scientific methods and scientific laws. If the principles we teach do not equip psychologists to deal with the behaviour of individuals, if they are so valueless that psychologists discard them and depend on common sense in practice, it is high time that we began looking for another set of principles. I believe that we should carefully and systematically explore the possibilities of the phenomenological frame of reference with that end in view. We owe it to psychology, we owe it to ourselves, we owe it to a world which is sorely in need of principles which will help its people to understand and work with one another.

#### REFERENCES

ALLPORT, G. W. "The Psychologist's Frame of Reference" (Psychological Bulletin, 37, 1940, 1-28).

Angyal, A. Foundations for a Science of Personality (New York: Commonwealth Fund, 1941).

<sup>3.</sup> BARTLETT, F. C. Remembering (New York: Macmillan, 1932).

4. ELKIN, F. "Specialists Interpret the Case of Harold Holzer" (Journal of Abnormal and Social Psychology, 42, 1947, 99-111).

5. Frank, L. K. "Projective Methods for the Study of Personality" (Journal of

Psychology, 8, 1939, 389-413).
6. Gibson, J. J. and Crooks, L. E. "A Theoretical Analysis of Automobile Driving" (American Journal of Psychology, 51, 1938, 453-71).

7. HILGARD, E. R. Theories of Learning (New York: Appleton-Century-Crofts,

8. Krechevsky, I. "Hypotheses in Rats" (*Psychological Review*, 39, 1932, 516-32).

9. Lecky, P. Self-Consistency: A Theory of Personality (New York: Island Press, 1945).

 LEEPER, R. "The Experimental Psychologists as Reluctant Dragons." Paper presented at APA meeting, 1946.

11. Maslow, A. H. "Dynamics of Personality Organization" (Psychological Review, 50, 1943, 514-58).

12. Masserman, J. H. Principles of Dynamic Psychiatry (New York: Saunders, 1946).

13. Mayo, E. Human Problems of an Industrial Civilization, 2nd Edition. Division of Research, Harvard University. (Boston: Graduate School of Business Administration, Harvard University, 1946).

14. MOWRER, O. H. and KLUCKHORN, C. "Dynamic Theory of Personality" in *Personality and the Behavior Disorders*, J. McV. Hunt, Editor. (New York: Ronald Press, 1944), Vol. I, 69-135.

15. MURPHY, G. Personality (New York: Harper & Bros., 1947).

16. Raimy, V. G. "The Self-Concept as a Factor in Counselling and Personality Organization" (Unpublished thesis, Ohio State University, 1943).

17. ROETHLISBERGER, F. J. and DICKSON, W. J. Management and the Worker (Cambridge: Harvard University Press, 1939).

 ROCERS, C. R. "Some Observations on the Organization of Personality" (American Psychologist, 9, 1947, 358-68).

ROSENZWEIG, S. "Converging Approaches to Personality" (Psychological Review, 51, 1944, 248-56).

20. SCHRODINGER, W. What is Life? (New York: Macmillan, 1946).

21. Sherif, M. and Cantril, H. The Psychology of Ego-Involvements (New York: Wiley, 1947).

 SNYGG, D. "Mazes in Which Rats Take the Longer Path to Food" (Journal of Psychology, 1, 1935-6, 153-66).

23. SNYGG, D. "The Need for a Phenomenological System of Psychology" (Psychological Review, 48, 1941, 404-24).

24. SNYCG, D. "The Relative Difficulty of Mechanically Equivalent Tasks" (Journal of Genetic Psychology, 47, 1935, 299-336).

25. SNYGG, D. and COMBS, A. W. Individual Behavior (New York: Harper & Bros., in press).

26. SOROKIN, P. A. and BERGER, G. Time Budgets of Human Behavior (Cambridge: Harvard University Press, 1939).

27. Wees, W. and Line, W. "The Influence of the Form of a Presentation Upon Reproduction: The Principle of Determination" (British Journal of Psychology (General Section), 28, 1937, 167-89).

28. WOODROW, H. "The Problem of General Quantitative Laws in Psychology" (Psychological Bulletin, 39, 1942, 1-27).

# PERSONALITY TESTS AND TEACHING ABILITY<sup>1</sup>

F. T. TYLER
University of California

Success in teaching, as in other professional fields, is probably related to such factors as academic achievement, intellectual ability, interests, and personality. It is obvious that neither an idiot nor an illiterate can be expected to teach: a fair intelligence and an adequate academic background are necessary for success. But experimental studies indicate that superiority greater than is required to meet the admission requirements of teacher-training institutions pays returns which are much smaller than those popularly believed to accrue. Several investigators have reported studies on the relationship of "test personality" to teaching success. This paper reports the results of a study of personality tests and their relationship to practice-teaching marks.

### RELATED STUDIES

In 1934, Laycock (8) reported the results of a study sponsored by the Canadian National Committee for Mental Hygiene to determine whether scores on the Bernreuter Personality Inventory were related to marks assigned to practice teaching. For 80 subjects, the correlations between marks and each of the four Bernreuter scales varied from -.21 to -.33. Laycock also compared the Bernreuter scores of the highest and the lowest guarters of the students selected on the basis of their practice-teaching marks. For each Bernreuter component the difference between the mean scores of these two groups was more than four times the probable error of the difference. The report did not indicate whether raw scores or centile equivalents had been used in the analysis. If centiles were used, the validity of some of the statistics is open to question, while if raw scores were used, the procedure of combining the scores of men and women into a single distribution is questionable, unless the two distributions were comparable. Even if the distributions were not dissimilar, there is an objection to grouping the two sexes into a single distribution. For instance, a raw score of 20 on the B2S scale is the forty-sixth centile for college men and the sixtieth for college women. The significance of the difference between these two centiles may be determined by computing the standard errors of the centiles and the difference between the two centiles, using the following formula:

<sup>1</sup>The writer is indebted to Dr. H. D. Carter, who read and criticized the manuscript.

$$\sigma_p = \frac{\sigma}{v} \sqrt{\frac{pq}{N}}$$

where  $\sigma_b = \text{standard error of centile "p"}$ 

 $\sigma$  = standard deviation of the standardization group p = proportion of the frequencies of the distribu-

tion below the given centile

q = 1 - p

y = ordinate at the centile "p"

N = number of cases in the standardization group.

Using the data of the manual (3):

$$\sigma_{p46} = 2.59$$

$$\sigma_{p60} = 3.45$$

$$\sigma_{p60-p46} = 4.31$$

The value of the t ratio  $\left(\frac{14}{4.31}\right)$  is 3.25, which is significant at the

1 per cent level. Thus it would seem that a given raw score may have significantly different centile equivalents for men and women.

The authors of Forecasting Teaching Ability report a correlation of .142  $\pm$  .055 between average teaching marks and Bernreuter scores, where the latter were taken to be the algebraic sum of +S, +D, -N, and -I as obtained from a simplified method of scoring the Bernreuter scales (14). The study was based upon 211 men and 191 women students attending the Ontario College of Education in 1934-5. As in the Laycock study no consideration was given to the fact that a given raw score may have different meanings for men and women, since they were treated as members of a single distribution. One wonders also about the value of using a composite score obtained by the algebraic addition of +B2S, +B4D, -B1N and -B3I. Consider the following two cases selected from the writer's files:

	RAW SCORES		CENTILES		
	Case 1	Case 2	Case 1	Case 2	
-B1N	58	32	57	67	
B2S	62	114	72	95	
-B3I	30	1	52	71	
B4D	49	65	46	56	
Alg. Sum	199	210			

The algebraic sums are very similar and yet the profiles indicate two different "test personalities." It appears, therefore, that the procedure used in the report may cover up the presence of real test differences. Such a condition is to be expected since the inter-correlations between these variables are reported as -.37, .95, -.80, -.31, .47, -.69 (3). The

th

cl

th

te

in

W

C

g

S

W

0

n

n

b

tl

te

te

C

n

fe

te

S

C

t

t

0

t

(

C

f

algebraic addition of scores from different sub-tests appears justified only if the inter-correlations are +1.00 or -1.00, otherwise an analysis of sub-test scores would likely be more rewarding. The discriminant function might be used to determine how to weight the sub-test scores in order to maximize the differences between the two extreme groups. The writer did this by using data from both the Laycock and the Ontario studies, since neither study gave all the data necessary for the calculation of the discriminant function. The weights obtained were very different from +1 and -1. This analysis is not, however, completely satisfactory, since the basic data derive from unrelated studies.

Grieder and Newburn (6) used the *Humm-Wadsworth Test* in a study of the relationship of personality characteristics of 127 women and 59 men to their marks in practice teaching. The authors report that there are more differences between the sexes than there are between extreme groups in practice-teaching marks. Despite this observation, their study used extreme groups which included both men and women. Apparently these authors employed raw scores, which actually may have different meanings for the two sexes, with the result that "real" (psychological) differences between extreme groups may remain unrevealed. They concluded that the *Humm-Wadsworth Test* had little value in predicting practice-teaching marks.

Rostker (13), using 11 male and 17 female teachers, found no significant correlations between measures of teaching success and measures of personality obtained from such tests as the Morris Trait Index L, the Bernreuter Personality Inventory, and the Washburn Social Adjustment Inventory. Rolfe (12), in a study involving 50 women and 7 men, reported low correlations between measures of teaching success and results on the University of Wisconsin Personality Test, as well as on the tests that were used by Rostker. In both studies, one wonders about the effect on the results of using a single group including both men and women. Such a procedure appears to assume that teachers constitute the neutral sex.

Evans and McConnell (5), in the process of standardizing the *Minnesota T-S-E Inventory*, found that social introversion-extroversion was associated with "student-teaching success," social extroversion being characteristic of the "more successful student teachers." The centile equivalents of the test scores are based upon equal numbers of men and women, and the same set of equivalents is used for either sex. No consideration was given to the fact that personality characteristics of successful men and women teachers may not be identical. This criticism applies to all the studies previously reviewed.

Dodge (4), reported a study based upon 301 cases selected from over 1,000 teachers in air-corps technical schools, and apprentice teachers in

their last year at the University of Illinois. Of these 301 cases, 239 were chosen as representing the best and the poorest of 1,000 teachers in the technical schools. The remaining 62 included all the apprentice teachers in agriculture and home economics at the University, divided into two groups, the more and the less successful, whereas the others were members of extreme groups chosen from 1,000 teachers. The final conclusions are based upon the analysis of 43 items subjectively categorized into five groups. The better teachers are: (1) more at ease in social contacts; (2) more willing to take the initiative; (3) free from worry and anxiety; (4) more sensitive to and valuing the opinions of others; (5) slower in making decisions. The results are based on a limited number of items and mainly upon subjects who may not have had any formal instruction in educational practice and theory, and who were chosen by senior officers who may not have been professional educators. None the less, the results are encouraging enough to indicate that personality tests may have value in a programme for the selection of students by teacher-training institutions.

For thirty-one women student teachers, Seagoe (15) reported significant correlations between the *Humm-Wadsworth Test* and the *Bell Adjustment Inventory*, and teaching success as rated on the *University of California Rating Scale for Practice Teaching*. The correlations between teaching success and the *Bernreuter F1C* and the *Thurstone Personality* 

Scale approached significance.

# THE SUBJECTS

In the fall of 1947, some weeks after the opening of the term, the co-operation of the members of the teacher-training class at the University of British Columbia was sought in an endeavour to determine whether personality tests could be used to predict which students were most likely to succeed in practice teaching. It was explained that this was a research problem, that we had no preconceived ideas on what should be the test characteristics of successful teachers; we were simply trying to discover them. The students were asked to answer the questions to the best of their insight. In return, the author agreed to have a personal interview with each member of the class on the meaning of his or her test results. The interview was not compulsory, but over 80 per cent of the class co-operated, each interview occupying between twenty and forty minutes. In response to a request from the students, each one was given a summary of the test results, in generalized form. Only in very rare instances were students informed of their actual centiles on the various components of the different tests.

In 1947-8 the teacher-training class included 49 men and 19 women, for all of whom complete test results were available. This study reports the results of the analysis of the test scores of the 49 men, since raw

scores are preferable to centiles for statistical computation, and since a given raw score for men may have a different meaning for women. Furthermore, personality characteristics of successful male teachers may not be identical with those of successful female teachers.

Two extreme groups were selected on the basis of the practice-teaching marks which had been assigned by the faculty of the Department of Education on the basis of observation of lessons, supplemented by comments and ratings received from critic teachers to each of whom a student had been assigned for a full week of practice teaching. Each student spent a total of six weeks in the practice-teaching situation. Each faculty member observed the work of a student from one to five times in the course of the year. From the 49 men, the 11 to whom the highest practice-teaching marks, and the 12 to whom the lowest practice-teaching marks had been assigned, were selected for study. There was not a significant difference between the mean ages of the groups, so that any personality differences cannot be attributed to age.

#### THE TESTS

Three tests were selected for study. The Johnson Temperament Analysis appeared to offer possibilities, as it purports to measure several components of personality which, on a priori grounds, might well be related to the qualities usually considered to be important for success in teaching. The Minnesota Personality Scale apparently measures some components in common with the Johnson Temperament Analysis, as well as certain others which should be significant for the present problem. Finally the various aspects of introversion which the Minnesota T-S-E test claims to measure might be expected to be useful in predicting success in a profession in which thinking, social and emotional introversion would appear to be important.

#### THE RESULTS

Mean raw scores of these two groups were determined on each of the sub-tests of the three tests selected for study. The t ratios were computed to test the significance of the differences by the formula (9):

$$t = \frac{M_1 - M_2}{\sqrt{\left(\frac{\sum d_1^2 + \sum d_2^2}{N_1 + N_2 - 2}\right)\left(\frac{1}{N_1} + \frac{1}{N_2}\right)}}$$

The means, differences, and t ratios are shown in Table I.

It appears that the *Johnson Temperament Analysis* would have little value in predicting practice-teaching success, since none of the differences between the two extreme groups approaches significance. On the other hand, the means of the sub-tests of the other tests tend to differentiate between the two extreme groups.

TABLE I
COMPARISON OF MEAN SUB-TEST SCORES OF GROUPS RATED
HIGH AND LOW IN PRACTICE TEACHING

JOHNSTON TEMPERAMENT ANALYSIS

Sub-	-test	High Score Group	Low Score Group	Difference (High-Low)	t-Ratio*
· ·	4	71.08	75.45	-4.37	-1.02
1	В	67.25	74.73	-7.48	-1.55
(	3	74.17	74.36	-0.19	-0.06
Г		92.50	83.64	8.86	1.63
F	2	91.17	89.09	2.08	.92
3	F	73.17	74.27	-1.10	-0.28
(	3	75.33	71.55	3.78	1.37
F	I	69.92	72.27	-2.35	-0.58
	I	89.08	85.91	3.17	.67

#### MINNESOTA PERSONALITY SCALE

Sub-test	High Score Group	Low Score Group	Difference (High-Low)	t-Ratio
1	165.42	148.00	17.42	2.58
2	219.08	195.45	23.63	2.01
3	120.83	105.82	15.01	1.85
4	136.00	122.91	13.09	2.12
5	99.50	79.64	19.86	2.75

#### MINNESOTA T-S-E INVENTORY

Sub-test	High Score Group	Low Score Group	Difference (High-Low)	t-Ratio
1	84.50	105.45	-20.95	-2.72
2	136.67	113.45	23.22	2.52
3	50.17	51.64	-1.47	-0.25

<sup>°</sup>A t-ratio of 2.83 is significant at the 1 per cent level; and of 2.08 at the 5 per cent level.

For further comparisons, the centile equivalents of the mean raw scores of each group on each sub-test are shown in Table II.

Results from the *Johnson Temperament Analysis* are to be regarded as very tentative, but the students rated as superior in practice teaching were on the average, more composed, cordial, and sympathetic, and less depressive, submissive, and impulsive.

According to the Minnesota tests, the superior student-teachers, on the average, showed superior moral and social adjustment, family relations, emotional stability, and possessed more conservative attitudes; they were also rated as more introvertive on the thinking scale and more extrovertive on the social scale of the T-S-E test. It should be

E

C

TABLE II
PERCENTILE EQUIVALENTS OF MEAN SUB-TEST SCORES OF GROUPS
RATED HIGH AND LOW IN PRACTICE TEACHING

JOHNSON TEMPERAMENT ANALYSIS		MINNESOTA PERSONALITY SCALE			MINNESOTA T-S-E INVENTORY			
Sub- test	High Score Group	Low Score Group	Sub- test	High Score Group	Low Score Group	Sub- test	High Score Group	Low Score Group
A	49	62	1	77	30	1	5	21
В	47	69	2	44	20	2	56	20
C	55	55	3	52	22	3	30	36
D	49	29	4	60	30			
E	81	67	5	30	5			
F	53	57						
G	46	27						1
H	57	63						
I	44	33						

observed that some of the students in the superior group might not be rated as really "top" teachers, and the inclusion of these may have affected the results, making it more difficult to obtain significant differences.

### Conclusions

It must be admitted that none of the sub-tests showed a significant difference between the two groups selected for study. Still, the results appear to the writer to be encouraging enough to warrant further study with larger numbers. This would permit the investigator to make an item analysis of each sub-test to select items which have greatest discriminative value and to eliminate the dead wood. It might thus be possible to prepare a relatively short test which would have considerable value in either a counselling or a selection programme. It should also be observed that the results obtained at the University of British Columbia might not be obtained at other teacher-training institutions because of a different philosophy, or different procedures used in assigning marks to practice teaching. As more data are accumulated it might become possible to analyse the profiles of each student in relation to the profiles of the mean scores of the two groups. Possibly the pattern of the profile would be more significant than individual scores on the sub-tests.

In conclusion, the following weaknesses of the study are recognized:

- (1) The number of subjects was small.
- (2) No attempt was made to determine test intelligence of the two groups—and this might possibly be the differentiating factor. There was not a significant difference between the mean scores on the com-

bined results of their examinations in elementary educational psychology and educational tests and measurements (t=1.25 with 20 degrees of freedom—since one student did not write the tests and measurement examination).

(3) No attempt was made to determine whether the differences might be attributed to different academic majors and minors. Thus the difference on sub-test 5 of the *Minnesota Personality Scale* might be related to the subjects' field of study. These factors require further investigation in order to determine the role of "test personality" in student-teaching success.

(4) The problem of selecting candidates for teacher training cannot be solved by restricting the investigation to the prediction of success in practice teaching. Only through follow-up studies to determine success on the job will it be possible to set up efficient criteria for admittance to a teacher-training programme.

#### REFERENCES

- BARR, A. S. "Measurement and Prediction of Teaching Efficiency; Summary of Investigations" (Journal of Experimental Education, 16, 1948, 203-83).
- BARR, A. S. "Winconsin Studies of Teaching Ability" (Journal of Educational Research, 41, 1948, 710-17).
- 3. Bernreuter, R. G. The Personality Inventory (California: Stanford University Press, 1931).
- Dodge, A. F. "What are the Personality Traits of the Successful Teacher?" (Journal of Applied Psychology, 27, 1943, 325-37).
- 5. Evans, C. and McConnell, T. R. "New Measure of Introversion-Extroversion" (Journal of Psychology, 12, 1941, 111-24).
- Grieder, C. and Newburn, H. K. "Temperament in Prospective Teachers" (Journal of Educational Research, 35, 1942, 683-93).
  - 7. Johnson Temperament Analysis (Los Angles: California Test Bureau, 1941).
- 8. LAYCOCK, S. R. "Bernreuter Personality Inventory in the Selection of Teachers" (Educational Administration and Supervision, 20, 1934, 59-63).
- 9. LINDQUIST, E. F. Statistical Analysis in Educational Research (New York: Houghton Mifflin Company, 1940).
- Minnesota Personality Scale, Darley, J. G. and McNamara, W. J. (New York: Psychological Corporation, 1941).
- 11. Minnesota T-S-E Inventory, Evans, C. and McConnell, T. R. (Chicago: Science Research Associates, 1942).
- 12. Rolfe, J. F. "Measurement of Teaching Ability" (Journal of Experimental Education, 14, 1945, 52-74).
- 13. ROSTKER, L. E. "Measurement of Teaching Ability" (Journal of Experimental Education, 14, 1945, 6-51).
- 14. Sandiford, Peter et al. Forecasting Teaching Ability. Bulletin No. 8, Department of Educational Research (Toronto: Department of Educational Research, University of Toronto, 1937).
- 15. Seagoe, May V. "Prognostic Tests and Teaching Success" (Journal of Educational Research, 38, 1945, 685-90),

# ETHICS AS PHILOSOPHY RATHER THAN PSYCHOLOGY

# ANTHONY M. MARDIROS

University of Alberta

In the September, 1948 issue of the Canadian Journal of Psychology Barnett Savery proposes to approach ethics from psychology rather than philosophy. Let us see where this leads him. He argues that the question "What is good?" or "What ought to be?" is more properly the question "What do I really desire?" and that this, since it is a matter of fact, is a scientific enquiry not a philosophical one, and belongs to the sphere of psychology. But to interpret the problem of ethics in this fashion amounts to saying that "good is that which someone desires."

Now this is no original conclusion; it was put forward by a great many moral philosophers including Socrates, Aristotle, Hobbes, Spinoza, Bentham, and Mill. The trouble with such a definition is that we are left with no standard; desires differ and therefore the nature of the good differs from one person to another. This, Savery claims, is an actual merit of his definition since it is a matter of common experience that there is no one standard but only varying standards.

If this were the case it is difficult to see what use psychology could be to ethics. Suppose it is discovered that A wants X, and B wants Y, and C wants Z, and suppose X, Y, and Z are discovered to be conflicting objects of desire, then all we can do is admit that there is no such subject of enquiry as ethics and that therefore ethics belongs neither to philosophy nor to psychology nor to any other subject.

Most of the philosophers mentioned above recognized this difficulty and tried to avoid it by saying that although men's actual desires conflict they would not do so if men had greater knowledge. For in the light of this knowledge, it was argued, men would discover that there was after all general agreement about the nature of the good or the desirable. These philosophers then proceeded to analyse what they considered men would find to be the common object of desire, and hence we get their various definitions of good. In essentials, Savery's procedure does not differ from that traditionally pursued by philosophers. He begins with the question, "What kind of world do I desire to live in?" and then changes it to, "What do I really desire?" and he explains the "really" by expanding the question to, "What kind of a world would I desire to live in if I knew enough about myself and about the world?" Thus he acknowledges that after all we are not concerned with what we desire in fact but with what we would desire in certain circumstances, for example if we were wiser.

Savery goes on to assert, in the manner of the aforementioned philosophers, that he in fact knows what is the common object of desire for most people. "Most people, we believe, desire to live; they desire to live together; they desire to find as much happiness in the world as possible." His argument can be summed up as follows. The good is what men desire; men appear to desire many different things, but if we look deeper we find that most men really have the same common aim, and this can be made the basis for practical ethical endeavour.

Four criticisms can be made of this reasoning.

1. There is nothing original about this conclusion and the argument by which it is reached. Aristotle said the same thing more consistently and plausibly.

2. The conclusion concerning a standard that is common to a majority of people is at odds with the relativism of Savery's starting point. If what the majority desires provides a standard, then there is such a common standard and the good is not relative.

3. However, a majority vote does not provide any sort of ethical standard: It only appears to do so if what the majority is supposed to want is good by some other ethical standard, as is the case with Savery's supposition about what most of us want. But what if the majority want to persecute an innocent minority? Is such persecution right and good simply because the majority really want it? In a slave-owning country is the man who stands out and condemns slavery immoral?

Savery dimly recognizes the difficulties of this position and throws overboard the majority test by saying that after all it rests entirely upon a bias. No standards can be justified. There are only facts about what people want and no way of resolving conflicts between different wants. With this lapse into relativism it is obvious that, to be logical, Savery should say that in truth there is no such subject as ethics. So far from saying this, in a succeeding paragraph he asserts that there is a logical possibility that some day someone may discover an absolute ethical standard. But if his analysis were true this would be logically impossible.

4. Are we to suppose that this aim common to most people is established by psychological research? If so, it seems that the psychological mountain has laboured in order to deliver a very small ethical mouse. As a matter of fact some psychologists have come to the opposite conclusion. Freud in his Civilization and its Discontents suggests that what man wants is not life lived together in mutual happiness, but death, rape, and destruction. If his view were confirmed, should this then determine our ethical standard?

Savery is not correcting a mistake in traditional moral philosophy; on the contrary, he is helping to perpetuate one. This mistake is the belief that, because values or standards are related to facts, they are derived from facts. Let us look at the analogous case of logic. We arrive at a knowledge of valid arguments by examining actual arguments and

fu

af

al

W

d

ti

tı

S

d

f

perceiving that some are valid and others invalid, and it is true that the valid forms we discover must be applicable to the ways in which people actually argue; but in order to discover what forms of argument are valid and what are invalid we do not try to find out whether some or most people do in fact argue in a certain way.

A psychologist may be interested in the trains of thought that people actually have and he may be interested in the origins and causes of people's thoughts, but he is not, as a psychologist, called upon to judge the validity of this thinking, and if he does so it is with standards derived from logic and not from psychology. Similarly with ethics, we can arrive at a knowledge of good and bad conduct only by being acquainted with actual conduct, and the standards we arrive at must in fact be applicable to actual conduct. Yet we should not argue that because some or most people do act in a certain way, their conduct is therefore right and good. The psychologist is interested in how people actually behave. He is not, as a psychologist, interested in passing moral judgments on such behaviour, but if he does so his standards are derived from ethics.

The practising psychologist may indeed wish to change the pattern of behaviour of his patient and he does so on the basis of certain judgments as to what is good and bad, but these are derived not from psychology but from outside it. Often such judgments are just the common uncriticized standards of the community of which psychologist and patient are part.

Once we have made our ethical judgments we may well call in the psychologist to help put them into effect. If we judge that the persecution or domination of a racial or religious minority is morally evil, we may turn to the psychologist to help us to eliminate this evil from our society. The psychologist can help us to discover the origin of racial hatreds in the minds of people, and he can advise us on methods of counter-propaganda and re-education, but this does not imply any unique connection between psychology and ethics, since we may equally well turn to other studies—in this instance to economics and politics—for guidance as to the best means of bringing our ethical judgments into practice. Psychology is relevant to ethics in that it investigates origins and causes, but so do a number of other studies which are equally relevant, and none in themselves provide ethical standards.

The basis of Savery's position is his conviction that ethical values are relative. But in what sense are morals relative? It is true that moral codes differ widely from one society to another, but is this inconsistent with the existence of a common ethical principle? To begin with, most moral codes in practice include rules, taboos, and customs which have nothing to do with ethics at all, except that they are con-

fused with rules that can properly be derived from ethical considerations. This is so because societies evolve patterns of behaviour which are only ethical in part. This we clearly perceive in modern society, where we approve of certain accepted ways of behaving at table, but do not consider it immoral to behave differently. In many cases primitive societies fail to distinguish the ethical from the non-ethical constituents of their codes of behaviour, and it is probable that in some spheres of conduct in modern society we too fail to make this necessary distinction, and perhaps it is just in these non-ethical or pseudo-ethical forms of conduct that the greatest variety occurs.

Secondly, it is probable that in any ethical code there are errors of judgment, that is, something is thought to be right which is wrong. We admit that societies in the past have made factual mistakes, such as holding the belief that the earth is a flat surface; and no doubt we hold similar erroneous beliefs today, which will be corrected in the future. I see no reason why something similar should not happen in the sphere of values, and that part of the difference in moral codes is due to the fact that all or some are in part erroneous.

Thirdly, there is another and perhaps the most important cause of the relativity of ethical codes. Let us suppose that the basis of ethics is to be found in the principle, "Act so as to produce the greatest hap-piness of the greatest number," (I think as a matter of fact that the basic ethical principles are much more complicated than this, but its very simplicity makes it useful as an example), and let us use this as a measuring rod with which to judge the behaviour patterns of different societies. We will see that much in the codes we examine is irrelevant to our principle, and we will also see that in many codes there are rules which deny our principle; and these therefore are to be condemned. But when all this is said, there may still be a residue of rules which are not irrelevant to, and do not contradict our standard, but rather serve it; and vet these very rules may differ from one society to another. Hence it is not necessary to assume that there is one way and only one way of achieving the greatest happiness of the greatest number, and, in fact, it seems most likely that where there are very different conditions of life there must be different ways of achieving the same principle. Judged by our proposed standard, Canada may be morally on the same level as a community hidden in the jungles of New Guinea, although the behaviour currents in the two societies may be of quite different patterns. I am not, of course, arguing that all codes of behaviour of all ages and climes are of equal moral merit. I am merely contending that very different kinds of behaviour may serve the same fundamental moral principle.

Now none of these types of relativity is incompatible with the existence of a common basic moral principle. Thus the principle is absolute, but the means of achieving the principle are relative, depending upon time, place, and circumstance.

Savery has merely argued that the means are relative, and this is something that none of the great moral philosophers has ever denied. None of them ever laid down a detailed code of conduct and declared this pattern of behaviour should be universally required. They were seeking to discover a basic absolute principle, not an absolute pattern of behaviour. Of course, individuals and groups, particularly religious sects, have claimed that their patterns of behaviour were absolutely valid and universally applicable, but such claims have rarely had philosophical sanction.

Mr. Savery not only wishes to argue that ethics is a psychological study; he declares it must also be a deterministic study. Now, determinism as a scientific principle asserts that certain kinds of events are correlated with certain other kinds of events, so that, given the former, the latter can be expected to follow. In some portions of some sciences (particularly physical science) this correlation between different kinds of events is complete, while in other sciences, and indeed in some fields of physical science, the correlation between events is not complete: so that we have only a partial determinism, the degree of which varies from one field of study to another. Even those who hold (without adequate foundation) a theoretical belief in complete determinism have to admit that in many fields of study, including psychology and the social sciences, there is in practice only partial determinism, i.e. there is not 100 per cent correlation between cause and effect. Therefore, the assertion that man is, in part, undetermined does not contradict any known scientific facts or principles.

I hold that man's actions are free and responsible when they depend upon his own decisions, and when these decisions are undetermined or at least only partially determined. This is another way of saying that human beings are a source of novelty in the world, and that the future, because of human beings, and perhaps because of other things, is not just an unfolding of what is already inherent in the past. As Savery points out, it has frequently been argued that both determinism and indeterminism are incompatible with freedom and responsibility; determinism, because it pushes responsibility for my acts further and further back into the infinite past, and indeterminism, because it separates my acts from my self. In either case responsibility does not lie with me; it either goes beyond me or does not reach me. In order to resolve this dilemma it has to be established that the act has at least part of its origin in me, and this can be accomplished only by recognizing that both determinism and indeterminism are required by the notion of responsibility, but that they are required at different points. It is required that my decisions be in part indetermined by pre-

e

ıt

r

t.

r-

ts

e.

as

e-

vious events or causes, and it is required that my acts should be largely determined by my decisions. We do not hold a man responsible for his actions if it can be shown that his decisions, or series of decisions, are completely determined by factors which lie outside of those decisions; or if we can show that in a given instance he was in some way incapable of making a decision, and that this inability was not due to some previous decision; or, finally, if we can show that although he makes decisions they do not determine his action. That is, he is not responsible for his action if he decides to act in a certain way but his hands, his legs, or his tongue behave otherwise. A man is therefore free and responsible when his actions are largely determined by his decisions, and when his decisions themselves are largely undetermined. The fact that we try to decide whether or not a person is deserving of punishment seems to support this analysis. On a completely determinist account, punishment can only serve as a deterrent against future acts of the same kind. What would be the point of trying to determine the desert of the person concerned? It might be said that what we are really doing is discussing whether, in such cases, punishment is in fact a deterrent. But this cannot be what we are doing, because any such occasion is one in which the possibility of punishment has not acted as a deterrent, and this of itself cannot throw any light upon future occasions where an individual is tempted to commit the same crime. If punishment were concerned merely with determent then all we need do is punish all law-breaking, hoping that this will act as a deterrent in many cases, but expecting that it will not in some. There would be no need to argue whether or not the law breaker deserved his punishment.

Mr. Savery's remarks on the relief felt by psychoneurotics when they are given his explanation of moral responsibility, have no bearing on the case. No doubt people like to be relieved of the feeling of responsibility for their real or imagined wrongdoing, but this does not settle the issue of whether or not they are responsible; and I doubt if it is a step on the road to mental health. Surely the healthy mental attitude involves recognition that we are in part responsible for our actions, and that some of these responsible actions have been morally wrong and are therefore to be regretted; but this regret should express itself not in useless brooding and self-recrimination concerning what is past, but in an effort to avoid similar moral errors in the future. It seems to me that we are more likely to get the good results which Mr. Savery wants from such an attitude than from the belief that all our errors were inherent in us as we lay in the cradle.

In conclusion I would like to point out that the issues dealt with in this discussion are all philosophical, not psychological, and that this in itself demonstrates that both Mr. Savery and I are talking philosophy not psychology.

# CANADIAN THESES IN PSYCHOLOGY, 1948

This list represents the fruits of our request to Canadian universities for titles of theses for advanced degrees in psychology completed in the calendar year 1948. To the best of our knowledge the list is complete.

- ALDRIDGE, G. J. "Factors contributing to the success and failure in case work with school age boys." M.A. Thesis, University of Toronto, 1948. Pp. 31 + x, MS. (Psychology Library, University of Toronto).
- BAKER, C. H. "A comparative study of the amplitude of tremor in arm and leg." M.A. Thesis, University of Toronto, 1948. Pp. 39 + v, MS. (Psychology Library, University of Toronto).
- Beauchemin, Jean-Marie. "L'Encurétique Délinquant." (Application de techniques projectives à l'étude d'un group d'éneurétiques délinquants). Thèse de Licence, Université de Montréal, 1948. Pp. 158, MS. (Institut de Psychologie, Université de Montréal).
- Bene, Mrs. Eva Marx. "Mothers' attitudes and nursery school children's adjustments." M.A. Thesis, University of British Columbia, 1948. Pp. ix + 67, MS. (The Library, University of British Columbia).
- BOURDEAU, GUY. "Les Aptitudes intellectuelles au cours classique." Thèse de Licence, Université de Montréal, 1948. Pp. 58 + xxii, MS. (Institut de Psychologie, Université de Montréal).
- Burns, Joyce Helen. "An investigation of the academic achievement ratios of university women seniors." M.A. Thesis, University of Toronto, 1948. Pp. 70, MS. (Psychology Library, University of Toronto).
- CARSON, JOHN J. "The validity of the interview as a technique in industrial selection." M.A. Thesis, University of Toronto, 1948. Pp. 40, MS. (Psychology Library, University of Toronto).
- CHALKE, F. C. RHODES, M. D. "The Thematic Apperception Test: Its use in the study of psychosomatic disorders." M.A. Thesis, Queen's University, 1948. Pp. iii + 78, MS. (The Library, Queen's University).
- COURVAL, JEAN. "Intérêts de loisirs des adolescents." Thèse de Licence, Université de Montréal, 1948. Pp. 145, MS. (Institut de Psychologie, Université de Montréal).
- Donaldson, John Stanley Ross. "The development of a standardized personality rating scale." M.A. Thesis, University of British Columbia, 1948. Pp. viii + 167, MS. (The Library, University of British Columbia).
- ELLIOTT, GORDON. "An investigation of possible correlates of abnormal abstract thinking capacity in a group of high school students." M.A. Thesis, University of Toronto, 1948. Pp. 67, MS. (Psychology Library, University of Toronto).
- ELRIC, Frère. "La Préparation du test S-E-A d'aptitute mathématique." M.A. Thesis, University of Ottawa, 1948. Pp. viii + 73, MS. (The Library, University of Ottawa).
- Fisher, Edward J. "A scoring scale for optometrists on the Strong Vocational Interest Blank." M.A. Thesis, University of Toronto, 1948. Pp. 46, MS. (Psychology Library, University of Toronto).
- FORGAYS, D. G. "The effect of positive and negative incentives in serial learning: fixation and variability of response as a result of symbolic reward and symbolic punishment." M.A. Thesis, McGill University, 1948. (The Redpath Library, McGill University).
- Francey, Ruth E. "A study on the epileptic personality." M.A. Thesis, University of Toronto, 1948. Pp. 26, MS. (Psychology Library, University of Toronto).

- Garneau, Jean. "Test collectif de rendement intellectuel." (Analyses des Item). Thèse de Licence, Université de Montréal, 1948. Pp. 111, MS. (Institut de Psychologie, Université de Montréal).
- GOTTHEIL, E. "An investigation into the effects of participation in a co-operative as compared with a competitive task on intra-group attitudes and rejection." M.A. Thesis, McGill University, 1948. (The Redpath Library, McGill University).
- IRVINE, LUCILLE. "Personality structures of truant and delinquent children." M.A.
  Thesis, McGill University, 1948. (The Redpath Library, McGill University).
- JEAN-LIONEL, Frère. "Présentation et étude statistique du test de lecture rapide et intelligente." M.A. Thesis, University of Ottawa, 1948. Pp. viii + 91, MS. (The Library, University of Ottawa).
- JOLY, JEAN-MARIE. "Une Etude critique de la théorie de David Wechsler." M.A. Thesis, University of Ottawa, 1948. Pp. viii + 94, MS. (The Library, University of Ottawa).
- JONES, MARIE, Mrs. "Rorschach Test performance of post-traumatic epileptic and non-epileptic head-injured veterans." M.A. Thesis, University of Toronto, 1948.
- JOURARD, S. M. "Sociometric status and its relation to attitudes, values, adjustment, and degree of acquaintance in a group of university residence males." M.A. Thesis, University of Toronto, 1948. Pp. 52, MS. (Psychology Library, University of Toronto).
- Keschner, Dorothee A. "A study of the relationship between vocabulary scores and sociometric status." M.A. Thesis, University of Toronto, 1948. Pp. 32, MS. (Psychology Library, University of Toronto).
- LAMOND, CONRAD M. "A comparison of leisure time interests of men rated at extremes on the Bell Adjustment Inventory Emotional Scale." M.A. Thesis, University of Toronto, 1948. Pp. 54, MS. (Psychology Library, University of Toronto).
- Lessard, Jean-Charles. "Valeur diagnostique du drame spontané." Thèse de Licence, Université de Montréal, 1948. Pp. 62, MS. (Institut de Psychologie, Université de Montréal).
- LYTTLETON, HUGH ATTRILL. "The effects of auditory distraction on visual attention."

  M.A. Thesis, University of British Columbia, 1948. Pp. iii + 52, MS. (The Library, University of British Columbia).
- MAILHIOT, FRANÇOISE. "Fantaisies de l'enfant sur l'école." Thèse de Licence, Université de Montréal, 1948. Pp. 87, MS. (Institut de Psychologie, Université de Montréal).
- MARSHALL, ARTHUR. "An investigation of the relationship between adjustment and interest of first year university veterans." M.A. Thesis, University of Toronto, 1948. Pp. 49, MS. (Psychology Library, University of Toronto).
- McCullough, H. Elizabeth. "The Wechsler-Bellevue test profile as an aid in diagnosing anxiety neurosis and hysteria." М.А. Thesis, University of Toronto, 1948. Pp. 47 + iv, MS. (Psychology Library, University of Toronto).
- McLeod, H. N. "A Rorschach study with pre-school children." M.A. Thesis, University of Toronto, 1948. Pp. 52, MS. (Psychology Library, University of Toronto).
- PLENDERLEITH, EILEEN MAVIS. "A study of British Columbia teachers' attitudes to students' behaviour problems." M.A. Thesis, University of British Columbia, 1948. Pp. x + 175, MS. (The Library, University of British Columbia).
- RAYMOND, ALBERT. "Le Problème de l'alcoolisme." Thèse de Licence, Université de Montréal, 1948. Pp. 83, MS. (Institut de Psychologie, Université de Montréal).

BF

Fa

as

D

of

P

n

ir

N

a

E

- ROBERTS, D. F. "A comparison of ratings of handwritten and typewritten essays."

  M.A. Thesis, University of Toronto, 1948. Pp. 27 + vii, MS. (Psychology Library, University of Toronto).
- SMITH, A. ARTHUR. "The perception of tri-dimensional apparent movement." M.A. Thesis, Queen's University, 1948. Pp. 42, MS. (The Library, Queen's University).
- Talbot, Betty M. "A longitudinal study of attentive behaviour of a group of preschool children." M.A. Thesis, University of Toronto, 1948. Pp. 45, MS. (Psychology Library, University of Toronto).
- Taylor, Sherman J. "A study of the attitudes attributed to workers by union officials and executives compared with those expressed by the workers themselves." M.A. Thesis, University of Toronto, 1948. Pp. 49, MS. (Psychology Library, University of Toronto).
- THOMPSON, NINA M. "Investigation of changes in I.Q. occurring in various ages." M.A. Thesis, University of Toronto, 1948. Pp. 38, MS. (Psychology Library, University of Toronto).
- Thomson, Mary. "An analysis of the sociometric ratings of groups of children from three to eight years of age." M.A. Thesis, University of Toronto, 1948. Pp. 32 + x. MS. (Psychology Library, University of Toronto).
- Wendt, R. A. "Extra-maze visual cues as a factor in maze learning in the rat." M.A. Thesis, University of Alberta, 1948. Pp. 20, MS. (The Library, University of Alberta).
- WILLIS, E. B. "Factors relating to teacher-child contacts in pre-school education." M.A. Thesis, McGill University, 1948. (The Redpath Library, McGill University).
- WRIGHT, MORGAN W. "A study in the prediction of academic success of undergraduate honour psychology students." M.A. Thesis, University of Toronto, 1948. Pp. 61 + xii, MS. (Psychology Library, University of Toronto).
- YÜ, HSI CHI, Miss. "A survey of the parent education movement in the United States of America and Canada." M.A. Thesis, University of Toronto, 1948. Pp. 65, MS. (Psychology Library, University of Toronto).
- Zubek, J. P. "A study of the local attitudes of high school students and adults towards the Doukhobors of southern British Columbia." M.A. Thesis, University of Toronto, 1948. Pp. 72, MS. (Psychology Library, University of Toronto)...

# BOOK BURSARIES FOR INSTRUCTORS

To instructors in the social sciences in Canada, "book bursaries" are offered by the Canadian Social Science Research Council. They are designed to aid junior members of departments, or social science staff generally in the financially-weaker institutions, to secure books directly helpful to them in their teaching or research, when they lack access to adequate library facilities. They are intended to stimulate broad scholarship and sound research.

The maximum value of a book bursary is \$100. Application forms may be obtained from the Secretary of the Canadian Social Science Research Council, 166 Marlborough Avenue, Ottawa.

#### **NEWS AND NOTES**

BRITISH COLUMBIA. Dr. S. N. F. Chant was appointed Dean of the Faculty of Arts and Science of the University of British Columbia and assumed his new duties on July 1, 1948. He continues to be head of the Department of Philosophy and Psychology, and lectures to one section of the Elementary Psychology Course. Dr. Frederick T. Tyler, formerly Professor of Education and Psychology in that University, took up his new appointment in September, 1948 as Associate Professor of Education in the School of Education, University of California, Berkeley. Dr. Ranton McIntosh, lately on the faculty of the University of Saskatchewan, was appointed to replace Dr. Tyler, and serves jointly in the Departments of Education and Philosophy and Psychology.

Miss F. Margaret Sage, formerly Senior Assistant in Psychology at U.B.C. is now proceeding to the M.A. degree in Psychology at Western Reserve University. She is serving as Assistant to the Director at the Remedial Reading Clinic at Cleveland College. Mr. Elvet G. Jones, formerly Class Assistant in Psychology at U.B.C., was employed during the summer of 1948 on job analysis in the Personnel Department of the City of Vancouver, and in the fall was appointed Instructor in Psychology

at Oregon State College.

Miss Majorie Munro, Psychologist at the Child Guidance Clinic, Vancouver, has been granted a year's leave of absence and is taking the diploma course in Clinical Psychology at the University of Toronto. Miss Dorothy Leggatt has taken over her responsibilities at the clinic. Miss Marion Macdonald resigned her position as Psychologist at Shaughnessy D.V.A. Hospital, Vancouver, and is now at the University of Toronto, engaged in research on security, and working toward the Ph.D. degree in psychology. Mrs. Margaret Bolton has replaced her as Psychologist. The Assistant Psychologist is Miss Elizabeth McCullough from Toronto, who interned at the Col. Mewburn Pavilion of the University of Alberta Hospital, Edmonton. Mrs. B. J. Warner is Junior Psychologist.

Dr. John C. Hewson of Stevenson and Kellogg Limited reports the appointment of Mr. E. P. Friesen to his staff last fall. Mr. Friesen is a graduate of U.B.C. in Arts and Commerce, and is a candidate for the Ph.D. degree at Columbia University. Dr. Hewson reports that he hopes work on employee opinion and morale may be added to the present

programme of the organization.

Early on the morning of November 25, 1948, fire completely destroyed the converted hut on the U.B.C. campus which housed the psychology laboratory, the preparation room, the office of *Professor E. S. W. Belyea*, and a lecture room. A good deal of equipment, many books and periodicals, and Mr. Belyea's personal notes and correspondence files were lost. By an outstanding effort on the part of the University authorities, new facilities were made ready in the new, permanent Applied Science Building in time for the opening of the spring term. The new laboratory provides increased accommodation for graduate students in

t

psychology. Other universities have generously assisted by lending apparatus, and progress has been made in replacing equipment destroyed. MANITOBA. *Professor H. W. Wright* retired from the Department of Psychology of the University of Manitoba at the end of the 1947-8 session. He is now living at Kitchener, Ontario, and is giving three lectures a week to the fourth year course in psychology at Waterloo College. *Dr. D. C. Williams*, who is now head of the Department of Psychology at Manitoba, has recently taken on the extra duty of Chairman (part-time) of the Manitoba Civil Service Commission.

NEW BRUNSWICK. *Dr. George J. Trueman*, President-Emeritus of Mount Allison University, died in Sackville, New Brunswick, on February 18, 1949. Dr. Trueman, who served as President of Mount Allison from 1923 to 1945, was an Honoray Life Member of the C.P.A.

NOVA SCOTIA. Mr. Allister MacMillan, a graduate student in psychology at Acadia University, held an appointment during the past summer as Psychologist at the Nova Scotia Hospital in Dartmouth, N.S. This is the first time, it is understood, that an appointment of this sort has been made at this mental hospital. Another appointment reported is that of Miss Ellen Piers as a Psychologist in the Neuro-psychiatric Division of the Department of Public Health. Miss Piers, who has her B.A. with a major in psychology followed by the B.Ed. degree and postgraduate work in Psychological Services at Teachers College, Columbia University, will be acting as a liaison between the Department of Health and the Guidance Division of the Department of Education.

ONTARIO. The following changes are reported from the London area: Mr. R. S. Devereux, who received his M.A. degree from the University of Western Ontario last June, was appointed Lecturer in the Department of Psychology at that University. Miss P. B. A. Struckett, a graduate in Honour Psychology from the same University, is now an Assistant Psychologist at the Westminster Hospital, while Miss Ann Scott transferred from that hospital to become Psychologist at the Col. Mewburn Pavilion of the University of Alberta Hospital, Edmonton, Alberta. Two former Assistant Psychologists at the Westminster Hospital, Miss N. I. Brougham and Miss J. B. Ellis, are now studying for the M.A. degree at McGill University and the University of Toronto, respectively. Miss M. R. Winterbottom is pursuing graduate studies in psychology on a fellowship at the University of Michigan. Miss Z. M. Wheable is now the Staff Psychologist at the Ontario Hospital, London.

Dr. K. S. Bernhardt was chosen by the Canadian Psychological Association to represent Canada at a meeting of the Social Sciences Division of U.N.E.S.C.O. in Paris in October, 1948.

Dr. William Line was in Great Britain in the summer of 1948, and attended the conference of the International Congress on Mental Health. He presented a paper entitled "Mental Health and Industry."

Professor E. A. Bott, who is a consultant on aviation psychology to the Defence Research Board, Ottawa, recently visited Washington and a number of American universities, accompanied by an R.C.A.F. officer, to confer upon personnel training and research programmes now being developed jointly by defence services and universities in the United States.

QUEBEC. Une section spéciale pour la préparation de professeurs pour classes de sous-doués a été fondée récemment à l'Ecole Normale Jacques-Cartier de Montréal. Les professeurs de cette nouvelle section sont MM. les abbés Irénée Lussier et Georges Riedl ainsi que les Docteurs Gérard L. Barbeau et Roland Vinette.

M. Sylvio de Grandmont a été élu président de l'Association des Orienteurs Professionnels de la province de Québec.

Le Dr. Georges Dufresne et Mlle. Claire Mathieu ont été nommés psychologues consultants au Départment des Affaires des Vétérans.

Le *Dr. Gaston Gauthier* a été nommé en charge de la pratique de l'orientation à l'Ecole de Pédagogie de l'Université Laval à Québec.

Le *Dr. Paul l'Archevêque* a été nommé directeur de la recherche et de l'orientation à la Commission scolaire de Québec.

Le *Dr. Blaise Laurier*, c.s.v., a été nommé assistant-directeur des études chez les Clercs de Saint-Viateur.

Mlle. Thérèse Gouin poursuit un voyage d'études de plusieurs mois en Europe. Le Professeur Edward J. McCracken a obtenu son doctorat en pédagogie de l'Université de Montréal. Le Dr. D. Voghel a été nommé psychologue consultant à la Cour Juvénile à Montréal. M. André Lussier et Mlle. Gabrielle Brunet ont été nommés psychologues consultants au Centre d'Orientation à Montréal.

The following acknowledgement to the Canadian Psychological Association was received last fall by Dean S. N. F. Chant, now Past President of the C. P. A., and it was felt that it would be appreciated by the members:

## Dear Dean Chant:

I wish to thank the Canadian Psychological Association and its Council for the honour they have so kindly done me in electing me an Honourary Life Fellow of the Association. I regret that circumstances have not permitted me to take an active part in the work of the Association, but I have followed with great interest its progress and with great satisfaction the recognition it, and its members, received in connection with the War. I am also greatly pleased with the rapid growth of the "Canadian Journal of Psychology" and predict for it an important place in Canadian publications.

Again thanking you for the honour which I deeply appreciate, and with all best wishes for the continued success of the Association and its publications, I am,

#### Yours very sincerely,

J. M. MacEachran, Emeritus Professor of Philosophy, University of Alberta.

# THE PSYCHOLOGICAL ASSOCIATION OF THE PROVINCE OF QUEBEC

1

L

d

D

D

D

E

F

F

F

G

G

G

G

G

G

G

G

H

H

H

H

Ke

## LIST OF MEMBERS

(Note: All addresses are Montreal addresses, unless otherwise stated).

## FULL MEMBERS

Alexander, Frances S., B.A., M.A., Ph.D. 1533 Mackay Street. Clinical Psychologist.

Archambault, P. Paul, B.A. 6569 Chabot Street. Vocational Counsellor.

Barbeau, Gerard L., B.A., B.P., Ph.D. 6383 24th Avenue, Rosemount, P.Q. Professor.

Bastien, Hermas, M.A., M.Ed., Ph.D. 4370 Beaconsfield Avenue. Supervisor.

Beachemin, C. H. Guy, Lic.Ps. 2245 Gouin Blvd. West. Psycho-Technician.

Beaudry, Gerard, B.A., Lic.Ped. 2202 Plessis Street. Teacher.

Blais, Thomas, License. 6372 St. Denis Street. Teacher.

Bois, Joseph S. A., B.A., M.A., Ph.D. Room 303, 1217 University Street. Consulting Psychologist.

Boulanger, J. T. A., B.Ped., Lic.Ped., Dip.Exp.Psych. 7874 Drolet Street. Director of Studies.

Boulard, Marcel, L.Ped., Dip. Orientation. 8542 Berri Street. Professor.
Bridges, James W., B.A., A.M., Ph.D. Sir George Williams College,
1441 Drummond Street. Professor.

Brown, Frederick T., B.Sc. 915 Victoria Avenue, St. Lambert, P.Q. Command Personnel Officer.

Cameron, D. Ewen, M.D. 1025 Pine Avenue West. Professor.

Cardozo, Mary, B.A., M.A. Children's Memorial Hospital, 1615 Cedar Avenue. Speech Therapist.

Chapdelaine, Hector (Br.), B.A., Lic.Ps. Ecole Normale St. Viateur, Rigaud, P.Q. Professor.

Chevrier, Jean Marc, M.A., Lic.Ped., Lic.Psy. 6377 des Ecores Street. Chef du Bureau d'Orientation.

Clarke, Douglass Burns, B.A., M.A. Sir George Williams College, 1441 Drummond Street. Professor.

Clarke, Frank R., B-7 Board of Trade Building, 300 St. Sacrament Street. Employment Counsel.

Cownie, Douglas H., B.Sc., M.Sc., C.M. 4870 Côte des Neiges Road. Physician.

Currie, Alexander B., B.Com., M.A., M.Educ., Ph.D. 475 Prince Arthur Avenue. Professor.

- DeBray, Alain, L.Ped. 8190 Berri Street. Instituteur.
- de Fircks, Paul, Ph.D. 4873 Western Avenue. Consulting Psychologist.
- de Grandmont Sylvio, L.Sc.Soc., Dip. Jour., Dip. Orient. 4514 Chambord Street. Instituteur.
- Desautels, Gerard J., B.A., Lic.Ped. et Orient. 759 St. Joseph Blvd. Vocational Counsellor.
- Desmarais, Gisele, Dip.Nursing, Dip.Orient.Prof. 6976 Chambord Street. Professor.
- Dufresne, Georges, B.A., L.Ph., S.Psych., Ph.D. 3482 Parc Lafontaine. Professor.
- Ethier, Wilfrid (Rev. Father), Ph.D. 445 St. Catherine Street East. Professor.
- Falk, Paul, B.A., M.A. 276 Villeneuve Street West. Placement Worker.
- Farquhar, Allan B., B.A. Box 28, North-Hatley, P.Q. Superintendent of Schools.
- Ferguson, George A., Ph.D. 1102 Elgin Terrace, Apt. 201. Professor.
- Gadoury, Louis D., B.A., B.Ped., Lic.Ped., Dip.Psych.Dip.Orient. 4479 Garnier Street. Professor.
- Gagnon, J. A. Aurele, B.A., M.A. 7600 Delanaudiere Street, Apt. 26. Personnel Officer, Quebec Command (Army).
- Gauthier, Gaston, Lic.Psy. 4205 Marquette Street.
- Gauthier, J., B.A., Lic.Sc.Nat., Lic.Ph., Lic.Ped. Arvida, P.Q. Professor.
- Gedeon (Frère), D.Ped. 63 4th Avenue, Ville LaSalle, P.Q. Professor.
- Girouard, J. L. Armand, Cert. Voc'l. Guid. 458 Hindland Avenue, Montreal South, P.Q. Employment Officer.
- Goldman, Leonard H., B.A., M.A. 3430 Park Avenue. Vocational Counsellor.
- Goldsman, A. Harold, B.A., M.A. 1441 Crescent Street. Vocational Counsellor.
- Gouin, Therese, B.A., Lic.Psy., M.A. 3466 McTavish Street. Psychological Interne.
- Hall, Oswald, B.A., M.A., Ph.D. 136 Lazard Avenue, Town of Mount Royal, P.Q. Professor.
- Hartogs, Renatus, M.A., M.S., Ph.D. 286 Willowdale Avenue. Clinical Psychologist.
- Hebb, D.O., B.A., M.A., Ph.D. Department of Psychology, McGill University. Professor.
- Hymovitch, Bernard, B.Sc., M.Sc. 4618 Hutchison Street. Lecturer.
- Joly, Richard, B.A., B.Th., L.Ph., M.A., Cert. Voc'l Guid. Rimouski, P.Q. Director of Guidance.
- Kellaway, Peter E. C., A.B., M.A., Ph.D. 456 Pine Avenue West, Apt. 32. Demonstrator.

M

M

N

N

0

P

P

P

P

R

R

Si

S

S

T

T

V

V

V

V

V

AB

C

- \*Kellogg, Chester E., A.B., A.M., Ph.D. 615 Pine Avenue, St. Lambert, P.O. Professor.
- Kepner, Charles W., A.B., Ph.D. 970 Sun Life Bldg. Industrial Psychologist.
- Kershman, John, B.Sc., M.D.C.M., M.Sc. 6210 Deacon Road, Apt. A-11. M.D.C.M.
- Lapointe, Philippe, B.A., L.Ped., L.Sc. Soc., Cert. Or. Prof. 2328A Orleans Street. Instituteur.
- L'Archevêque, Paul, M.A., D.Ped. 45 d'Artigny Street, Quebec, P.Q. Professor.
- LaRivière, André, B.Ed., M.A., L.Ped., Dip.Letters. 2351 Robert Street. Student.
- Laurier, Blaise (Brother), B.A., B.A.Ped., M.A., Ph.D. 1145 St. Viateur Street West. Professor.
- LaViolette, Forrest E., Ph.D. 1463 Bishop Street. Professor.
- Lehmann, Heinz, M.D. 6603 LaSalle Blvd. Clinical Director.
- Lemay, Edmour (Rev.), L.Ph. 3113 Guyard Street. Professor
- Lussier, Joseph I., L.Ph., Dip.Or. Prof., Dip.Psy. 831 Rockland Avenue. Professor.
- Mahoney, Gerald M., B.Sc., M.Sc. 7076 Garnier Street. Student.
- Mailhiot, Claude, D.Ps. 4174 Oxford Avenue. Clinical Psychologist.
- Mailloux, Noel (Rev. Father), Ph.D., S.Th.L. Department of Psychology, University of Montreal. Professor.
- Malmo, Robert B., B.A., M.A., Ph.D. 6720 Sherbrooke Street West. Professor and Clinical Psychologist.
- Marcotte, J. E. Alexandre, M.D. 5642 Woodbury Avenue. Psychiatrist and Professor.
- Martin, Jean, B.A., M.A., L. Paed. Ph.D. 2439 Centre Street. Consultant. Matthews, Agnes, B.A., M.A. 3106 Westmount Blvd. West. School Principal.
- McCracken, Edward J., B.A., M.A. 4875 Western Avenue. Professor.
- MacFarlane, A. H., B.A., M.A. 4715 Roslyn Avenue. Student Counsellor.
- McIlhone, John, B.A., B.Ed., M.A., Ph.D. 884 Davaar Avenue. Professor.
- Miller, Jean Charles, M.D. Mastai, P.Q. Psychiatrist.
- Milner, Brenda, B.A. 4462 Sherbrooke Street West.
- Milner, Esther, B.A., M.A. 5835 Kimbark Avenue, Chicago 37, Illinois. Research Assistant.
- Moreau, Gilles-Yvon, D.Ps. 4164 Parc Lafontaine. Consulting Psychologist.
- Moreault, Louis, L.Ps. 55 d'Auteuil Street, Quebec, P.Q. Professor.

Deceased.

- Moreault, Huguette M., B.A., M.A., L.Ps. 55 d'Auteuil Street, Quebec, P.Q. Psychologist.
- Murray, Kenneth H., B.Sc., M.Ed. 112 Dunrae Avenue. Guidance Counsellor.
- Nichols, Marie Ange, B.S., M.A., Ed.D. 1575 Summerhill Avenue. Consulting Psychologist.
- Norris, Kenneth E., B.A., M.A., Ph.D. 3450 King Edward Avenue. Principal, Sir George Williams College.
- O'Reilly-Hewitt, F. T., B.Com., M.A. 3429 Peel Street.
- Pagé, Joseph L. S., Dip.Ed.Exp.Ps., B.Paed. 6677 Iberville Avenue. District Army Examiner.
- Pinard, Adrien (Rev.), B.A., L.Th., L.Ps. 3880 Côte des Neiges Road. Professor.
- Plante, Lucien (Rev.), L. Ped. 2177 Bercy Street. Professor.
- Prados, Miguel, B.A., M.D. 1025 Pine Avenue West. Professor.
- Prefontaine, L., L.S.S., D.O.P. 480 St. Joseph Blvd. East. Regional Superintendent Unemployment Insurance.
- Ross, Verity Mitchell, B.Sc., M.Sc. 3432 Peel Street.
- Rosvold, Haldor E., B.S., M.A., Ph.D. 159 Cartier Avenue, Pointe Claire, P.O. Professor.
- Silverman, Baruch, M.D.C.M. 1 Ellerdale Road. M.D.
- Sofin, Rosalie, B.A., M.A. 3335 Ridgewood Road, Apt. 4. Vocational Counsellor.
- Spearman, Donald, B.A., M.A., L.Ps., Ph.D. 3055 Sherbrooke Street West, Apt. 5. Psychologist.
- Tremblay, Arthur, B.A., L.S.S., C.Orient., M.Ed. 73 d'Auteuil Street, Quebec, P.Q. Professor.
- Tuckman, Jacob, M.A., Ph.D. 4920 Clanranald Avenue. Executive Dir., Jewish Voc'l Service.
- Vinette, Roland, D.Ped. 7458 Christophe Colomb. Professor.
- Webster, Edward C., B.A., M.A., Ph.D. Dept. of Psychology, McGill University. Consulting Psychologist.
- Wigdor, Blossom T., B.A., M.A. 5580 Gatineau Avenue, Apt. 16. Psychologist.
- Wilson, Douglas J., B.A., M.A., Ph.D. 7420 Maynard Avenue. Editor.
- Wolofsky, Esther, B.A., M.A. 917 Hartland Avenue. Vocational Counsellor.

## ASSOCIATE MEMBERS

- Boyd, Edgar R., B.A. 2302 Clifton Avenue. Teacher.
- Clancy, Rose, B.A., B.Sc. 3710 Queen Mary Road, Apt. 4. Supervisor of Job Anal.

- Crutchlow, Eileen G., B.A. 456 Pine Avenue, Apt. D. Psychologist.
- Cumner, Diana M., 3980 Côte des Neiges Road.
- DeGrace, Antoine, D.S.P. 1954 Rachel Street East. Occupational Counsellor.
- Dorken, Herbert, B.Sc. 4771 Sherbrooke Street West. Student.
- Finn, Armand, D.C.L., B.Com. 2050 Grey Avenue. Job Analyst.
- Fortier, J. Theo, B.Orient. 825 Sherbrooke Street East. Counsellor.
- Frankowska, Mary Rose, 3465 Côte des Neiges Road, Apt. 61. Counsellor.
- Furlong, Michael G., B.A., B.Ed., M.A. 645 Prince Arthur Street West, No. 2. Occupational Counsellor.
- Grandbois, Gabriel A., D.S.E., D.O.S. 1196 Berri Street. Placement Officer.
- Greaves, Edwin, B.A., M.A. 24 Lake Breeze Avenue, St. Eustache sur le Lac, P.Q. Supervisor Employment Bureau.
- Grenier, Jean, 8614 de Gaspe Street. Ass't Director Personnel D.V.A.
- Hayward, Jean McC., B.Sc. 3106 Westmount Blvd. Teacher.
- Henault, Roger, B.A., Lic. Ped., Dip.Psy.Ed. 1276 St. Joseph Blvd. Professor.
- Hoffman, Joseph R., B.A., M.A. 5578 Woodbury Avenue. Counsellor.
- Laliberté, Brigitte, B.Sc. 400 Prince Arthur Street West. Counsellor.
- Lansdell, Herbert C., B.Sc., M.A. 452 Osborne Avenue, Verdun, P.Q. Lecturer.
- Lavoie, Joseph Stanislas (Br.), Dip.Lit.Ang., Dip.S.P. Dip.Orient. Collège Saint Joseph, Berthierville, P.Q. Professor.
- Lebergott, Ruth W., B.A. 3025 Sherbrooke Street West. Placement Worker.
- Lefebvre, Paul (Br.), Dip.Ped., Dip.Orient Scol., Dip.Orient. Prof., B.O.P. Collège Saint Joseph, Berthierville, P.Q. Profesor.
- Magny, Gabriel Nelson, 644 Bloomfield Avenue. Occupational Counsellor.
- Malloy, Helga, B.Sc., M.A. 3534 University Street.
- Mathieu, Jean Marie, B.A., B.Paed. 4917 St. Urbain Street. Personnel Selection Officer.
- Morris, Harold M., B.A., M.A. 4647 Hutchison Street. Guidance Counsellor.
- Rankine, Elspeth, B.A. 8031 Western Avenue. Psychologist.
- Read, Lea, B.Sc., B.A. 4598 Decarie Blvd., Apt. 6. Employment Relations.
- Romuald, (Brother), B.A., Lic. Sc. Ped. 244 Sherbrooke Street East. Professor.

Ross, Harold, B.A., M.A. 5351 Park Avenue. Educational Consultant.
Tobin, Fergus, B.A., M.A. 36 LaSalle Road, Lachine, P.Q. Personnel Manager.

# STUDENT MEMBERS

- Barrett, Francis, D., 10151 St. Charles Street. Student.
- Beaudry, Marie, B.A. 41 Hazelwood Avenue. Student.
- Béchard, Monique, M.A., D.Ps. 3994 Parc Lafontaine. Student.
- Bernatchez, Aime, B.A. 2743 Maplewood Avenue. Student.
- Bourdeau, Guy, B.A. 3835 Berri Street. Student.
- Brunet, Gabrielle, B.Ps. 4751 Grosvenor Avenue. Student.
- Carabine, William F., B.A. 7745 Querbes Avenue, Apt. 4. Student.
- Chawmont, Victor, 3880 Côte des Neiges Road. Student.
- Clarke, Ronald Scott, 194 Selby Street. Student.
- Clement, Joseph Marcel, Rosemere, Terrebonne Co., P.Q. Student.
- Constantineau, Lionel, 5260 Papineau Street. Student.
- Cormier, Dollard, B.A. 5302 Decelles Avenue. Student.
- Corneau, Yvon, B.A., B.Ph. 1225 Bernard Avenue West. Student.
- Crochetière, James Charles, B.Sc. 42 Bank Street, Sherbrooke, P.Q. Counsellor.
- Daoust, Olivier, 732 St. Marguerite Street. Counsellor.
- Davis, Patrick, 14 Second Avenue, Iberville, P.Q. Student.
- De Grandpré, (Rev. Père) Marcel, B.Ps. 3880 Côte des Neiges Road.
- Dempsey, Peter, 3880 Côte des Neiges Road.
- DeShield, George D., B.A. 810 Walker Street. Student.
- Dubreuil, Guy, 5432 Notre Dame de Grâce Avenue. Student.
- Fournier, Guy, B.A. 860 Dunlop Avenue. Student.
- Garneau, Jean, B.A. 353 Olivier Avenue. Student.
- Gauthier, Gaston, 71 d'Auteuil Street, Quebec, P.Q. Directeur.
- Genest, Lucienne, B.A. 6510 Henri Julien Street. Student.
- Gill, Charles E., B.A., Lic. Psy. 1368 Notre Dame Street, Three Rivers, P.O. Consulting Psychologist.
- Goodwin, Harold R. W., M.A. 4350 Coronation Avenue. Teacher.
- Gouin, Therèse, B.A. 3466 McTavish Street. Student.
- Guindon, Jeannine, B.A. 4370 Papineau Street. Student.
- Gratton, Pauline, 4062 Marlowe Avenue. Student.
- Hamelin, (Father) Roger, L.Ps., M.A., B.Ped., B.A. Ecole Notre Dame des Monts, Lisbourg Co. d'Argenteuil, P.Q. Counsellor.
- Herbert, Bernard, B.A., B.Ps. 243 East St. Joseph Blvd. Student.
- Holmes, Antony Frederick, B.A. 1619 Lincoln Avenue, Apt. 5. Student.
- Irvine, Lucille, B.A. 5453 Victoria Avenue. Student.
- Jolin, Louis J. C., B.A. 289 Main Street, Waterloo, P.Q. Student.
- Kingsland, Keith W., 11534 London Street, St. Laurent, P.O. Student.

- Lapointe, François, 2349 Melrose Avenue. Student.
- Laurin, Gaetane, B.A. 96 St. Catherine Street. Student.
- Lavoie, Guy, B.A., B.Ps. 5475 Notre Dame de Grâce Avenue. Student.
- Lecavalier, Louis Emile, B.A. 85 Côte St. François, St. Laurent, P.Q. Student.
- Lemay, Roger, 6555 des Ecores Street. Student.
- LeTendre, Paul Emile, B.A. 920 Sherbrooke Street East. Student.
- Leveille, Mme. Arthur, B.A., B.Ps. 28 Kelvin Avenue. Professor.
- Lussier, André, M.A. 830 Rockland Avenue.
- MacIsaac, Roy Gerald, B.A. 1455 Drummond Street. Counsellor.
- Mailhiot, Françoise, B.A. 4174 Oxford Avenue. Student.
- Marcotte, Yves, B.A. 4675 de Lanaudiere Street. Student.
- Mathieu, Claire, B.A., M.A., L.Ps. 3809 Marlowe Avenue. Student.
- McFarlane, Elizabeth Ruth, B.A. 4715 Roslyn Avenue.
- Meunier, Maurice, B.Ps. 456 Duluth Street. Student.
- Miville, Romeo, L.Ph. 189 Jean Talon Street East.
- Nantel, Regine, B.A. 1485 Bernard Avenue West, Apt. 1. Student.
- Nelson, Erma, B.A. 529 Prince Albert Avenue. Teacher.
- Ordower, Hinda, B.A. 1343 Lajoie Avenue. Student.
- Poirier, Joseph L., 915 Victoria Avenue, St. Lambert, P.Q.
- Pollard, Douglas, Box 653, Cobalt, Ont. 3485 McTavish Street, Montreal, Student.
- Randles, Mrs. A., 1800 McGregor Street, Apt. 302. Student.
- Renaud, Paul, B.A., M.A. 33 Fairmount Avenue East. Student.
- Riedl, George E., M.A. 3725 St. Denis Street. Student.
- Ritchie, John Alexander, B.A. No. 16, 5360 Côte St. Luke Road. Student.
- Robert Gisèle, B.A. 2402 Aylwin Street. Student.
- Rossiter, Mary Ellen, B.A., M.A. 3410 Atwater Avenue, Apt. 9. Student.
- Saint Pierre, Lionel H., B.A. 10949 St. Lawrence Blvd. Student.
- Schnabel, Hans, B.A. 4192 Marlowe Avenue. Student.
- Ship, Samuel, B.A. 5366 Esplanade Avenue. Student.
- Shulman, Robert, 4522 Girouard Avenue, Apt. 9. Student.
- Stein, Ruth L., B.A. 7756 Stuart Avenue. Student
- Summerskill, John, B.A. 303 Sydney Street, Cornwall, Ont. Student.
- Tagiuri, Renato, B.Sc. 1 Chelsea Place. Student.
- Thibert, Clement, 244 Sherbrooke Street East. Student.
- Trottier, Michel, B.A. 8777 Basile Routhier. Student.
- Valade, Louis R., B.A. Chambly Road, St. Hubert, P.Q. Counsellor.
- Wack, Dunstan, B.Sc. 3880 Côte des Neiges Road. Student.
- Wake, Frank R., B.A. 2240 Sherbrooke Street East, Apt. 2. Student.
- Watts, George F., B.A. 44 Wicksteed Avenue. Principal.
- Wiggett, Edward G., B.A. Richmond Hill High School, Richmond Hill, Ont. Student.

